

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) This SDS is for generic information purposes and does not reflect required country specific information for OEL

CLEANER 14 Supercedes Date: 08-Sep-2017 Revision Date 25-May-2018 Revision Number 2

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Name	CLEANER 14
Pure substance/mixture	Substance
EC No	201-159-0
CAS No	78-93-3
REACH Registration Number	01-2119457290-43-XXXX
Chemical Name	butanone

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use	Solvent mixture.
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

Company Name

Bostik Benelux SA-NV Meulestedekaai 86 B-9000 Gent, Belgium Tel: +32 (9) 255 1717 Fax: +32 (9) 255 1701

E-mail address

SDS.box-EU@bostik.com

1.4. Emergency telephone number

Emergency Telephone

No information available

Section 2: HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity (single exposure)	Category 3 - (H336)
Flammable liquids	Category 2 - (H225)

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2.2. Label Elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Contains : Methyl ethyl ketone



Signal Word DANGER

Hazard statements

H225 - Highly flammable liquid and vapour H319 - Causes serious eye irritation H336 - May cause drowsiness or dizziness

Special provisions concerning the labelling of certain mixtures

EUH066 - Repeated exposure may cause skin dryness or cracking

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear protective gloves and eye/face protection

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P241 - Use explosion-proof electrical/ventilating/lighting/equipment

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower P235 - Keep cool

P501 - Dispose of contents/ container to an approved waste disposal plant

Additional information

This product requires tactile warnings if supplied to the general public

2.3. Other Hazards

General Hazards

In use may form flammable/explosive vapour-air mixture.

PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB

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Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	REACH Registration Number
Methyl ethyl ketone	201-159-0	78-93-3	80 - 100	Eye Irrit. 2 (H319) STOT SE 3 (H336) Flam. Liq. 2 (H225) (EUH066)		01-2119457290-43- XXXX

Full text of H- and EUH-phrases: see section 16

Note: ^ indicates not classifed, however, the substance is listed in section 3 as it has an OEL.

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

3.2. Mixtures

Not applicable

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice	If medical advice is needed, have product container or label at hand.
Inhalation	Remove to fresh air.
Skin Contact	Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention.
Eye contact	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing. Call a doctor immediately.
Ingestion	If swallowed, do not induce vomiting: seek medical advice immediately and show this container
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	or label.	
Self-Protection of the First Aider	Use personal protection recommended in Section 8 unnecessary and unprotected personnel.	3. Isolate the hazard area and deny entry to
4.2. Most important symptoms and e	ffects, both acute and delayed	
Symptoms	None known.	
4.3. Indication of any immediate me	lical attention and special treatment needed	
Note to doctors	Treat symptomatically.	
Use CO2, dry chemical, or foam. Unsuitable Extinguishing Media Use water spray or fog; do not use str 5.2. Special hazards arising from the Carbon monoxide, carbon dioxide and 5.3. Advice for firefighters	substance or mixture	
Wear self contained breathing apparatus for fire fighting if necessary.		
Section 6: ACCIDENTAL RELEA	SE MEASURES	
6.1. Personal precautions, protective	equipment and emergency procedures	
Personal Precautions Remove all sources of ignition. Evacua	te personnel to safe areas. Ensure adequate ventilation,	, especially in confined areas.
Water spray may reduce vapour; but	nay not prevent ignition in closed spaces.	
For emergency responders Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.		

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6.2. Environmental precautions

Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

6.3. Methods and material for containment and cleaning up

Methods for Containment	Dyke far ahead of spill; use dry sand to contain the flow of material. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).
Methods for cleaning up	Use clean non-sparking tools to collect absorbed material. Dyke far ahead of spill for later disposal.
6.4. Reference to other sections	
Reference to other sections	See Section 12: ECOLOGICAL INFORMATION Section 7: HANDLING AND STORAGE Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling

Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Take precautionary measures against static charges. Use explosion-proof electrical/ventilating/ lighting/ equipment.

General Hygiene Considerations

Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep only in the original container/package in a cool well-ventilated place.

7.3. Specific end use(s)

Other Information

Recommendation(s). Observe technical data sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

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Only European Community Occupational Exposure Limits will be shown in this document. Please refer to regional SDS for further information.

Chemical N	lame	European Union	
Methyl ethyl	ketone	TWA: 200 ppm	
78-93-	-3 TWA: 600 mg/m ³		
		STEL: 300 ppm	
		STEL: 900 mg/m ³	
Derived No Effect Level (DNEL) No information available Predicted No Effect Concentration No information available.			
(PNEC)			
8.2. Exposure controls			
Engineering Controls	Ensure adequate ventilation, especially in confined areas.		
Personal Protective Equipment Eye/Face Protection Skin and Body Protection	t Tight sealing safety goggles. Face protection shield. Antistatic footwear. Wear fire/flame resistant/retardant clothing. Gloves made of plastic or rubber. Suitable protective clothing. Apron.		
Environmental Exposure Controls	Do not allow into any sewer, on t	he ground or into any body of water.	

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

nation available
Remarks • Method hation available / 174.2 °F / 15.8 °F hation available Detion available Not applicable for liquide
nation available Not applicable for liquids
n n / n

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Lower flammability limit	No information available
•	No information available
Vapour Pressure	No information available
Vapour Density	No information available
Relative Density	
Water Solubility	No information available
Solubility in Other Solvents	No information available
Partition Coefficient	No information available
Autoignition Temperature	515 °C / 959 °F
Decomposition Temperature	No information available
Explosive Properties	No information available
Explosive Limits	No information available
Upper	No information available
Lower	No information available
Oxidising Properties	No information available
Kinematic Viscosity	No information available
Dynamic Viscosity	No information available
9.2. Other information	
Softening Point	No information available
Molecular Weight	No information available
Solvent content (%)	No information available
Solid content (%)	No information available
Density	0.8 g/ml
Bulk Density	No data available
VOC content (%)	

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

Stable under recommended storage conditions.

Explosion Data	
Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	May be ignited by friction, heat, sparks or flames.

10.3. Possibility of hazardous reactions

Possibility of Hazardous Reactions

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None under normal processing.

10.4. Conditions to avoid

Keep away from heat, sparks and flames.

10.5. Incompatible materials

Strong acids and bases.

10.6. Hazardous decomposition products

None under normal use conditions.

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

No information or data specific to the product on this toxicological (health) effect is available.

Inhalation	No data available.
Eye contact	No data available.
Skin Contact	No data available.
Ingestion	No data available.
Sensitisation	No data available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin Corrosion/Irritation	Not applicable.
Serious eye damage/eye irritation	Not applicable.
Sensitisation	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Carcinogenicity	Not applicable.

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Reproductive Toxicity	No information available.
STOT - Single Exposure	No information available.
STOT - Repeated Exposure	No information available.
Target Organ Effects	Central nervous system, Eyes, Respiratory system, Skin.
Aspiration hazard	No information available.
Numerical measures of toxicity	
Acute Toxicity	
The following values are calculated base	ed on chapter 3.1 of the GHS document mg/kg mg/l
Component Information	
Toxicity Data	No information available

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl ethyl ketone	= 2483 mg/kg (Rat)	= 5000 mg/kg (Rabbit)	= 11700 ppm (Rat) 4 h
78-93-3			

Section 12: ECOLOGICAL INFORMATION

<u>12.1. Toxicity</u>

Ecotoxicity

No information available

Component Information

Data obtained on the component(s) include

Chemical Name	Algae/aquatic plants	Fish	Crustacea	M-Factor
Methyl ethyl ketone	EC50=1972 mg/l	LC50 96 h 3130 - 3320 mg/L	EC50 48 h > 308 mg/L (Daphnia	
78-93-3	(Pseudokirchneriella subcapitata)	(Pimephales promelas flow-	magna)	
		through)		

12.2. Persistence and degradability

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No information available.	
12.3. Bioaccumulative potential	
No information available.	
Partition coefficient	No information available
12.4. Mobility in soil	
Mobility in soil	No information available.
12.5. Results of PBT and vPvB assessme	<u>nt</u>
The components in this formulation do r	not meet the criteria for classification as PBT or vPvB.
12.6. Other adverse effects	

No information available

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused Product	s Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Improper disposal or reuse of this container may be dangerous and illegal.
European Waste Catalogue	08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances
Other Information	Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORT INFORMATION

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-	
33	
UN1193	
3	
II	
UN1193, Ethyl methyl ketone, 3, II, (-9°C c.c.)	
Np	
None	
1 L	
F-E, S-D	
nex II of MARPOL 73/78 and the IBC Code	No information available
11011102	
1 L	
UN1193	
Ethyl methyl ketone	
Ethyl methyl ketone 3 II	
	II UN1193, Ethyl methyl ketone, 3, II, (-9°C c.c.) Np None 1 L F-E, S-D nex II of MARPOL 73/78 and the IBC Code UN1193 Ethyl methyl ketone 3 II UN1193, Ethyl methyl ketone, 3, II Not applicable F1 None 1 L

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Description 14.5 Environmental Hazard 14.6 Special Provisions	UN1193, Ethyl methyl ketone, 3, II Not applicable None
ΙΑΤΑ	
14.1 UN/ID no	UN1193
14.2 Proper Shipping Name	Ethyl methyl ketone
14.3 Transport hazard class(es)	3
14.4 Packing Group	II
Description	UN1193, Ethyl methyl ketone, 3, ll
14.5 Environmental Hazard	Not applicable
14.6 Special Provisions	None
Limited Quantity (LQ)	1 L
ERG Code	3L

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Check whether measures in accordance with Directive 94/33/EC for the protection of young people at work must be taken.

Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

Registration, Evaluation, Authorization, and Restriction of Chemicals (REACh) Regulation (EC 1907/2006)

EU-REACH (1907/2006) - Candidate List of Substances of Very High Concern (SVHC) for Authorization in accordance with Article 59 This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

EU-REACH (1907/2006) - Annex XVII - Substances subject to Restriction This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

EU-REACH (1907/2006) - Annex XIV - List of substances subject to Authorization

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

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Dangerous substance category per Seveso Directive (2012/18/EU) P5a - FLAMMABLE LIQUIDS or P5b - FLAMMABLE LIQUIDS or P5c - FLAMMABLE LIQUIDS

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

Persistent Organic Pollutants Not applicable

National Regulations

France

Occupational Illnesses (R-463-3, France)

Chemical Name	French RG number
Methyl ethyl ketone	RG 84
78-93-3	

Germany

Ordinance on Industrial Safety and Health - Germany - BetrSichV Flammable liquid (R11), EEC: refer to Annex III No. 1 (fire and explosion hazards) and § 7 paragraph 4

Netherlands

List of Carcinogenic, mutagenic and reproductive toxin substances in accordance with Inspectorate SZW (Netherlands) Not Listed

15.2. Chemical safety assessment

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No information available

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet			
Full text of H-Statements referred to the H319 - Causes serious eye irritation H336 - May cause drowsiness or dizzin H225 - Highly flammable liquid and vap EUH066 - Repeated exposure may cau	ess pour		
Legend SVHC: Substances of Very High Concer	n for Authorisation:		
Legend Section 8: Exposure controls a TWA TWA (time-weigh Ceiling Maximum limit va PBT Persistent, Bioaccumulative, and STOT (RE): Specific target organ toxicit STOT (SE): Specific target organ toxicit EWC: European Waste Catalogue	ted average) Ilue Toxic (PBT) Chemicals ty - Repeated exposure	STEL *	STEL (Short Term Exposure Limit) Skin designation
Key literature references and sources Classification and labeling data calcula		n raw material su	ppliers
Prepared By	Product Safety & Regulat	tory Affairs	
Revision Date	25-May-2018		
Indication of changes			
Revision Note	Not applicable.		
Training Advice	Provide adequate inform	ation, instructio	n, and training for operator
Further information	No information available		

This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

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Section 1 Exposure Scenario Title

Title:

Manufacture of substance

Use Descriptor

-	
Sector(s) of Use	SU10, SU3, SU8, SU9
Process Categories	PROC1, PROC15, PROC2, PROC3, PROC4, PROC8a, PROC8b
Environmental Release Categories	ERC1, ERC4
Specific Environmental Release Category	

Processes, tasks, activities covered

Manufacture of the substance or use as an intermediate, process chemical or extracting agent. Includes recycling/ recovery, material transfers, storage, maintenance and loading (ncluding marine vessel/barge, road/rail car and bulk container).

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product Characteristic Liquid Duration, frequency and amount Covers daily exposures up to 8 hours (unless stated differently)[G2]

Covers percentage substance in the product up to 100 %[G13]

Other given operational conditions affecting workers exposure

Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes

use at not more than 20°C above ambient temperature[G15]

Contributing Scenarios/

Specific Risk Management Measures and Operating Conditions

(only required controls to demonstrate safe use listed)

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level. Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. General exposures (closed systems) PROC1 No other specific measures identified. General exposures (closed systems) PROC2 No other specific measures identified. General exposures (closed systems) PROC3 No other specific measures identified. General exposures (open systems) PROC4 No other specific measures identified. Process sampling PROC8b No other specific measures identified. Laboratory activities PROC15 No other specific measures identified. Bulk transfers (open systems) PROC8b No other specific measures identified. Bulk transfers (closed systems) PROC8b No other specific measures identified. Equipment cleaning and maintenance PROC8a Drain down and flush system prior to equipment break-in or maintenance. Storage PROC1 Store substance within a closed system. Storage PROC2 Store substance within a closed system. Section 2.2 Control of environmental exposure **Product characteristics** Not applicable Duration, frequency and amount Not applicable

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Environmental factors not influenced by risk management
Not applicable
Other given operational conditions affecting environmental exposure
No exposure assessment presented for the environment [G40]
Technical conditions and measures at process level (source) to prevent release
Not applicable
Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil
Not applicable
Organisation measures to prevent/limit release from site
Not applicable
Conditions and measures related to municipal sewage treatment plant
Not applicable
Conditions and measures related to external treatment of waste for disposal
Not applicable
Conditions and measures related to external recovery of waste
Not applicable
Section 3 Exposure Estimation
3.1. Health
Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29] The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]
3.2. Environment
Not applicable
Section 4 Guidance to check compliance with the Exposure Scenario
4.1. Health
Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37] Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risk

are managed to at least equivalent levels.[G23]

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4.2. Environment

Not applicable

Section 1 Exposure Scenario Title	
Title:	
Distribution of substance	
Use Descriptor	
Sector(s) of Use	SU3, SU8, SU9
Process Categories	PROC1, PROC15, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9
Environmental Release Categories	ERC1, ERC2, ERC3, ERC4, ERC5, ERC6A, ERC6B, ERC6C, ERC6D, ERC7
Specific Environmental Release Category	
Processes, tasks, activities covered	
	car and IBC loading) and repacking (including drums and small unloading, distribution and associated laboratory activities.
Section 2 Operational conditions and risk manage	ment measures
Section 2.1 Control of worker exposure	
Product Characteristic	
Liquid	
Duration, frequency and amount	
Covers daily exposures up to 8 hours (unless stated differently)[G2] Covers percentage substance in the product up to 100 %[G13]	
Other given operational conditions affecting workers exposure	
Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes use at not more than 20°C above ambient temperature[G15]	
Contributing Scenarios/	
Specific Risk Management Measures and Operating Conditions	
(only required controls to demonstrate safe use listed)	

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. General exposures (closed systems) PROC1 Handle substance within a closed system. General exposures (closed systems) PROC1 Handle substance within a closed system.

General exposures (closed systems) PROC3 No other specific measures identified. **General**

exposures (open systems) PROC4 No other

specific measures identified.

Process sampling PROC3

No other specific measures identified.

Laboratory activities PROC15

No other specific measures identified. **Bulk transfers (closed systems) PROC8b** No other specific measures identified.

Bulk transfers (open systems) PROC8b

No other specific measures identified.

Drum and small package filling PROC9

Fill containers/cans at dedicated fill points supplied with local extract ventilation.

Equipment cleaning and maintenance PROC8a

Apply vessel entry procedures including use of supplied compressed air.

Drain down and flush system prior to equipment break-in or maintenance.

Storage PROC1

No other specific measures identified.

Storage PROC2

No other specific measures identified.

Section 2.2 Control of environmental exposure

Product characteristics

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Not applicable
Duration, frequency and amount
Not applicable
Environmental factors not influenced by risk management
Not applicable
Other given operational conditions affecting environmental exposure
No exposure assessment presented for the environment [G40]
Technical conditions and measures at process level (source) to prevent release
Not applicable
Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil
Not applicable
Organisation measures to prevent/limit release from site
Not applicable
Conditions and measures related to municipal sewage treatment plant
Not applicable
Conditions and measures related to external treatment of waste for disposal
Not applicable
Conditions and measures related to external recovery of waste
Not applicable
Section 3 Exposure Estimation
3.1. Health
Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when
the operational conditions/risk management measures given in section 2 are implemented.[G29]
The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]
3.2. Environment
Not applicable
Section 4 Guidance to check compliance with the Exposure Scenario
4.1. Health

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Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37]

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title	
Title:	
Formulation and (re)packing of substances and m	ixtures
Use Descriptor	
Sector(s) of Use	SU10, SU3
Process Categories	PROC1, PROC14, PROC15, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9
Environmental Release Categories	ERC2
Specific Environmental Release Category	
Processes tasks activities covered	

Processes, tasks, activities covered

Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfers, mixing, tabletting, compression, pelletisation, extrusion, large and small scale packing, sampling, maintenanance and associated laboratory activities.

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product Characteristic

Liquid

Duration, frequency and amount

Covers daily exposures up to 8 hours (unless stated differently)[G2]

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Covers percentage substance in the product up to 100 %[G13] Other given operational conditions affecting workers exposure Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes use at not more than 20°C above ambient temperature[G15] **Contributing Scenarios/ Specific Risk Management Measures and Operating Conditions** (only required controls to demonstrate safe use listed) **General measures (Flammable Liquid)** Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level. Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. General exposures (closed systems) PROC1 No other specific measures identified. General exposures (closed systems) PROC2 Handle substance within a closed system. General exposures (closed systems) PROC3 Handle substance within a closed system. General exposures (open systems) PROC4 Provide extract ventilation to points where emissions occur. Batch processes at elevated temperatures Operation is carried out at elevated temperature (> 20°C above ambient temperature). PROC3 Handle substance within a closed system. Process sampling PROC3 No other specific measures identified. Laboratory activities PROC15 No other specific measures identified.

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Bulk transfers PROC8b	
Handle substance within a closed system.	
Mixing operations (open systems) PROC5	
Wear a respirator conforming to EN140 with Type A filter or better.	
Manual Transfer from/pouring from containers PROC8a Provide	
extract ventilation to points where emissions occur.	
Drum/batch transfers PROC8b	
Use drum pumps or carefully pour from container.	
Production of preparations or articles by tabletting, compression, extrusion, pelettisation PROC14 Wear a	
respirator conforming to EN140 with Type A filter or better.	
Drum and small package filling PROC9	
Fill containers/cans at dedicated fill points supplied with local extract ventilation.	
Equipment cleaning and maintenance PROC8a Apply vessel entry procedures including use of supplied compressed air.	
Drain down and flush system prior to equipment break-in or maintenance.	
Storage PROC1	
Store substance within a closed system.	
Storage PROC2	
Store substance within a closed system.	
Section 2.2 Control of environmental exposure	
Product characteristics	
Not applicable	
Duration, frequency and amount	
Not applicable	
Environmental factors not influenced by risk management	
Not applicable	
Other given operational conditions affecting environmental exposure	
No exposure assessment presented for the environment [G40]	
Technical conditions and measures at process level (source) to prevent release	
Not applicable	
Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil	
Not applicable	

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Organisation measures to prevent/limit release from site

Not applicable

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Available hazard data do not support the need for a DNEL to be established for other health effects.[G36]

Risk Management Measures are based on qualitative risk characterisation. [G37] Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title	
Title:	
Use in Coatings - Industrial	
Use Descriptor	

Europe - BE

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Sector(s) of Use	SU3
Process Categories	PROC1, PROC10, PROC13, PROC14, PROC15, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9
Environmental Release Categories	ERC4
Specific Environmental Release Category	ESVOC 4.3a.v1

Processes, tasks, activities covered

Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities.

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product Characteristic

Liquid

Duration, frequency and amount

Covers daily exposures up to 8 hours (unless stated differently)[G2] Covers percentage substance in the product up to 100 %[G13]

Other given operational conditions affecting workers exposure

Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes use at not more than 20°C above ambient temperature[G15]

Contributing Scenarios/ Specific Risk Management Measures and Operating Conditions (only required controls to demonstrate safe use listed)

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. General exposures (closed systems) PROC1 Handle substance within a closed system.

General exposures (closed systems) with sample collection Use in contained systems PROC2 Handle substance within a closed system.

Ensure material transfers are under containment or extract ventilation.

Film formation - force drying, stoving and other technologies Operation is carried out at elevated temperature (> 20°C above ambient temperature). PROC2 Handle substance within a closed system. Ensure material transfers are under containment or extract ventilation.

Mixing operations (closed systems) General exposures (closed systems) PROC3 Handle

substance within a closed system.

Ensure material transfers are under containment or extract ventilation.

Film formation - air drying PROC4

Provide extract ventilation to points where emissions occur.

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Preparation of material for application Mixing operations (open systems) PROC5 Provide
extract ventilation to points where emissions occur.
Spraying (automatic/robotic) PROC7
Carry out in a vented booth provided with laminar airflow.
Manual Spraying PROC7
Wear a respirator conforming to EN140 with Type A filter or better.
provide a good standard of controlled ventilation (10 to 15 air changes per hour).
Material transfers PROC8a
Clear transfer lines prior to de-coupling.
Provide extract ventilation to material transfer points and other openings.
Material transfers PROC8b
Clear transfer lines prior to de-coupling.
Roller, spreader, flow application PROC10
Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.
Dipping, immersion and pouring PROC13
Provide extract ventilation to points where emissions occur.
Avoid manual contact with wet work pieces.
Laboratory activities PROC15
No other specific measures identified.
Material transfers Drum/batch transfers Transfer from/pouring from containers PROC9 Provide
extract ventilation to material transfer points and other openings.
Production of preparations or articles by tabletting, compression, extrusion, pelettisation PROC14 Provide
extract ventilation to points where emissions occur.
Section 2.2 Control of environmental exposure
Product characteristics
Not applicable
Duration, frequency and amount
Not applicable
Environmental factors not influenced by risk management
Not applicable
Other given operational conditions affecting environmental exposure
No exposure assessment presented for the environment [G40]
Technical conditions and measures at process level (source) to prevent release

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Not applicable

Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil

Not applicable

Organisation measures to prevent/limit release from site

Not applicable

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37]

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title

Title:

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Use in Cleaning Agents - Industrial		
Use Descriptor		
Sector(s) of Use	SU3	
Process Categories	PROC1, PROC10, PROC13, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b	
Environmental Release Categories	ERC4	
Specific Environmental Release Category		
Processes, tasks, activities covered	·	
Covers the use as a component of cleaning products including transfer from storage, pouring/unloading from drums or containers. exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand), related equipment cleaning and maintenance.		
Section 2 Operational conditions and risk management measures		
Section 2.1 Control of worker exposure		
Product Characteristic		
Liquid		
Duration, frequency and amount		
Covers daily exposures up to 8 hours (unless stated differently)[G2] Covers percentage substance in the product up to 100 %[G13]		
Other given operational conditions affecting workers exposure		
Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes use at not more than 20°C above ambient temperature[G15]		
Contributing Scenarios/ Specific Risk Management Measures and Operating Conditions (only required controls to demonstrate safe use listed)		

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level. Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of avalative atmosphere. Use any protective systems approved for flammable substances. Bestrict line

of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. **Automated process with (semi) closed systems Use in contained systems PROC2** Avoid carrying out operation for more than 4 hours. or

Wear a respirator conforming to EN140 with Type A filter or better.

Automated process with (semi) closed systems Drum/batch transfers PROC3

Avoid carrying out operation for more than 4 hours. or

Wear a respirator conforming to EN140 with Type A filter or

better. Application of cleaning products in closed systems

PROC2 Avoid carrying out operation for more than 4 hours. or

Wear a respirator conforming to EN140 with Type A filter or better.

Filling / preparation of equipment from drums or containers PROC8b

Ensure material transfers are under containment or extract ventilation.

Use in contained batch processes PROC4

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Provide extract ventilation to points where emissions occur.	
Degreasing small objects in cleaning station PROC13	
Provide extract ventilation to points where emissions occur.	
Cleaning with low-pressure washers PROC10	
provide a good standard of controlled ventilation (10 to 15 air changes per	
nour). Avoid carrying out operation for more than 4 hours. or	
Wear a respirator conforming to EN140 with Type A filter or better. Cleaning	
with high pressure washers PROC7 provide a good standard of controlled	
ventilation (10 to 15 air changes per hour). Avoid carrying out operation for nore than 4 hours. or	
Near a respirator conforming to EN140 with Type A filter or better.	
Mean a respirator conforming to EN140 with Type A finter of better. Manual Surfaces Cleaning PROC10	
provide a good standard of controlled ventilation (10 to 15 air changes per	
nour). Avoid carrying out operation for more than 4 hours. or	
Near a respirator conforming to EN140 with Type A filter or better.	
Storage PROC1	
Ensure samples are obtained under containment or extract ventilation.	
Section 2.2 Control of environmental exposure	
Product characteristics	
Not applicable	
Duration, frequency and amount	
Not applicable	
Environmental factors not influenced by risk management	
Not applicable	
Other given operational conditions affecting environmental exposure	
No exposure assessment presented for the environment [G40]	
Fechnical conditions and measures at process level (source) to prevent release	
Not applicable	
Fechnical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil	
Not applicable	
Drganisation measures to prevent/limit release from site	

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Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37] Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title	
Title:	
Lubricants - Industrial	
Use Descriptor	
Sector(s) of Use	SU3
Process Categories	PROC1, PROC10, PROC13, PROC17, PROC18, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9

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Environmental Release Categories	ERC4, ERC7
Specific Environmental Release Category	

Processes, tasks, activities covered

Covers the use of formulated lubricants in closed and open systems including transfer operations, operation of machinery/engines and similar articles, reworking on reject articles, equipment maintenance and disposal of wastes.

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product Characteristic

Liquid

Duration, frequency and amount

Covers daily exposures up to 8 hours (unless stated differently)[G2]

Covers percentage substance in the product up to 100 %[G13]

Other given operational conditions affecting workers exposure

Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes use at not more than 20°C above ambient temperature[G15]

Contributing Scenarios/ Specific Risk Management Measures and Operating Conditions (only required controls to demonstrate safe use listed)

CLEANER 14 Supercedes Date: 08-Sep-2017 Revision Date 25-May-2018 Revision Number 2

General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. General exposures (closed systems) PROC1 Handle substance within a closed system. General exposures (closed systems) PROC2 Handle substance within a closed system. General exposures (closed system. Gener

No other specific measures identified.

Filling / preparation of equipment from drums or containers PROC8a Use drum pumps or carefully pour from container.

Filling / preparation of equipment from drums or containers PROC8b Use

drum pumps or carefully pour from container.

Initial factory fill of equipment PROC9

Ensure material transfers are under containment or extract ventilation.

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Operation and lubrication of high energy open equipment PROC17 Restrict area of openings to equipment. Operation and lubrication of high energy open equipment PROC18 No other specific measures identified. Roller application or brushing PROC10 provide a good standard of controlled ventilation (10 to 15 air changes per hour). Treatment by dipping and pouring PROC13 Restrict area of openings to equipment. Spraying PROC7 Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. Maintenance (of larger plant items) and machine set up PROC8b Clear transfer lines prior to decoupling. Maintenance (of larger plant items) and machine set up Operation is carried out at elevated temperature (> 20°C above ambient temperature). PROC8b Provide extract ventilation to emission points when contact with warm (> 50°C) lubricant is likely. Wear suitable gloves tested to EN374. Maintenance of small items PROC8a Avoid carrying out operation for more than 4 hours. **Remanufacture of reject articles PROC9** Avoid carrying out operation for more than 4 hours. Storage PROC1 No other specific measures identified. Storage PROC2 No other specific measures identified. Section 2.2 Control of environmental exposure **Product characteristics** Not applicable Duration, frequency and amount Not applicable Environmental factors not influenced by risk management Not applicable Other given operational conditions affecting environmental exposure No exposure assessment presented for the environment [G40] Technical conditions and measures at process level (source) to prevent release Not applicable
Revision Date 25-May-2018 Revision Number 2

Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil

Not applicable

Organisation measures to prevent/limit release from site

Not applicable

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29] The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2.	Environment	

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37]

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

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Section 1 Exposure Scenario Title	
Title:	
Metal working fluids / rolling oils - Industrial	
Use Descriptor	
Sector(s) of Use	SU3
Process Categories	PROC1, PROC10, PROC13, PROC17, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9
Environmental Release Categories	ERC4
Specific Environmental Release Category	
Processes, tasks, activities covered	
· · · · •	cluding transfer operations, rolling and annealing activities, cation of corrosion protections (including brushing, dipping osal of waste oils.
Section 2 Operational conditions and risk management n	neasures
Section 2.1 Control of worker exposure	
Product Characteristic	
Liquid	
Duration, frequency and amount	
Covers daily exposures up to 8 hours (unless stated Covers percentage substance in the product up to 100 %[G	
Other given operational conditions affecting workers exp	osure

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Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes
use at not more than 20°C above ambient temperature[G15]

Contributing Scenarios/ Specific Risk Management Measures and Operating Conditions (only required controls to demonstrate safe use listed)

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. General exposures (closed systems) PROC1 Handle substance within a closed system. General exposures (closed systems) PROC2 Handle substance within a closed system. General exposures (closed systems) PROC3 Handle substance within a closed system. General exposures identified. Bulk transfers PROC8b

Provide enhanced general ventilation by mechanical means.

Filling / preparation of equipment from drums or containers PROC8b Use drum pumps or carefully pour from container.

Filling / preparation of equipment from drums or containers PROC5 Use

drum pumps or carefully pour from container.

Filling / preparation of equipment from drums or containers PROC9

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Use drum pumps or carefully pour from container. Process sampling PROC8b Use dedicated equipment. Metal machining operations PROC17 Provide extract ventilation to points where emissions occur. Treatment by dipping and pouring PROC13 Provide enhanced general ventilation by mechanical means. Spraying PROC7 Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. Roller application or brushing PROC10 Provide enhanced general ventilation by mechanical means. Automated metal rolling/forming Use in contained systems Operation is carried out at elevated temperature (> 20°C above ambient temperature). PROC2 Handle substance within a predominantly closed system provided with extract ventilation. Semi-automated metal rolling/forming Operation is carried out at elevated temperature (> 20°C above ambient temperature). PROC17 Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. Semi-automated metal rolling/forming PROC4 Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. Equipment cleaning and maintenance Dedicated facility PROC8b No other specific measures identified. Equipment cleaning and maintenance Non-dedicated facility PROC8a Provide enhanced general ventilation by mechanical means. Storage PROC1 Store substance within a closed system. Transfer via enclosed lines Storage PROC2 Store substance within a closed system. Transfer via enclosed lines Section 2.2 Control of environmental exposure **Product characteristics** Not applicable Duration, frequency and amount Not applicable

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Not applicable

Other given operational conditions affecting environmental exposure

No exposure assessment presented for the environment [G40]

Technical conditions and measures at process level (source) to prevent release

Not applicable

Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil

Not applicable

Organisation measures to prevent/limit release from site

Not applicable

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29] The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37] Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks

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are managed to at least	equivalent levels.[G23]
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4.2. Environment

Not applicable

Section 1 Exposure Scenario Title	
Title:	
Use as binders and release agents - Industrial	
Use Descriptor	
Sector(s) of Use	SU3
Process Categories	PROC1, PROC10, PROC13, PROC14, PROC2, PROC3, PROC4, PROC6, PROC7, PROC8a, PROC8b
Environmental Release Categories	ERC4
Specific Environmental Release Category	ESVOC 4.10a.v1
Processes, tasks, activities covered	
Covers the use as binders and release agents inclubrushing) and handling of waste.	ding material transfers, mixing, application (including spraying and
Section 2 Operational conditions and risk manage	ement measures
Section 2.1 Control of worker exposure	
Product Characteristic	
Liquid	
Duration, frequency and amount	
Covers daily exposures up to 8 hours (unless Covers percentage substance in the product up to 2	
Other given operational conditions affecting work	kers exposure
Assumes a good basic standard of occupational hy	giene is implemented [G1] Assumes

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Contributing Scenarios/

Specific Risk Management Measures and Operating Conditions

(only required controls to demonstrate safe use listed)

General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. **Material transfers PROC1**

Transfer via enclosed lines

Material transfers PROC2

Transfer via enclosed lines

Material transfers PROC3

Transfer via enclosed lines

Drum/batch transfers PROC8b

No other specific measures identified.

Mixing operations (closed systems) PROC3 No

other specific measures identified.

Mixing operations (open systems) PROC4 provide a good standard of

controlled ventilation (10 to 15 air changes per hour). Mold forming PROC14

Provide extract ventilation to points where emissions occur.

Casting operations (open systems) Operation is carried out at elevated temperature (> 20°C above ambient temperature). Aerosol generation due to elevated process temperature PROC6

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Provide extract ventilation to points where emissions occur.
Wear a respirator conforming to EN140 with Type A filter or better.
Spraying Machine PROC7
Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.
Roller application or brushing PROC10
Provide extract ventilation to points where emissions occur.
Spraying Manual PROC7
Carry out in a vented booth or extracted enclosure.
Storage PROC1
Store substance within a closed system. Storage PROC2
Store substance within a closed system.
Dipping, immersion and pouring PROC13
Provide extract ventilation to points where emissions occur.
Wear a respirator conforming to EN140 with Type A filter or better.
Section 2.2 Control of environmental exposure
Product characteristics
Not applicable
Duration, frequency and amount
Not applicable
Environmental factors not influenced by risk management
Not applicable
Other given operational conditions affecting environmental exposure
No exposure assessment presented for the environment [G40]
Technical conditions and measures at process level (source) to prevent release
Not applicable
Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil
Not applicable
Organisation measures to prevent/limit release from site
Not applicable
Conditions and measures related to municipal sewage treatment plant
Not applicable
Conditions and measures related to external treatment of waste for disposal

Conditions and measures related to external treatment of waste for disposal

CLEANER 14 Supercedes Date: 08-Sep-2017 Revision Date 25-May-2018 Revision Number 2

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Available hazard data do not support the need for a DNEL to be established for other health effects.[G36]

Risk Management Measures are based on qualitative risk characterisation. [G37]

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

CLEANER 14 Supercedes Date: 08-Sep-2017 Revision Date 25-May-2018 Revision Number 2

Section 1 Exposure Scenario Title	
Title:	
Use as a fuel - Industrial	
Use Descriptor	
Sector(s) of Use	SU3
Process Categories	PROC1, PROC16, PROC2, PROC3, PROC8a, PROC8b
Environmental Release Categories	ERC7
Specific Environmental Release Category	ESVOC 7.12a.v1
Processes, tasks, activities covered	
Covers the use as a fuel (or fuel additive), and include maintenance and handling of waste.	es activities associated with its transfer, use, equipment
Section 2 Operational conditions and risk management r	neasures
Section 2.1 Control of worker exposure	
Product Characteristic	
Liquid	
Duration, frequency and amount	
Covers daily exposures up to 8 hours (unless stated differently)[G2] Covers percentage substance in the product up to 100 %[G13]	
Other given operational conditions affecting workers exposure	

CLEANER 14 Supercedes Date: 08-Sep-2017 Revision Date 25-May-2018 Revision Number 2

Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes
use at not more than 20°C above ambient temperature[G15]

Contributing Scenarios/ Specific Risk Management Measures and Operating Conditions (only required controls to demonstrate safe use listed)

CLEANER 14 Supercedes Date: 08-Sep-2017 Revision Date 25-May-2018 Revision Number 2

General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. **Bulk transfers PROC8b**

Clear transfer lines prior to de-coupling.

Drum/batch transfers PROC8b

Use drum pumps or carefully pour from container.

General exposures (closed systems) Use in contained batch processes PROC1 No other specific measures identified. General exposures (closed systems) Use in contained batch processes PROC2 No other specific measures identified. General exposures (closed systems) Use in contained batch processes PROC3 No other specific measures identified. Use as a fuel PROC1 Handle substance within a closed system. Use as a fuel PROC2 Handle substance within a closed system.

Use as a fuel PROC16

Handle substance within a closed system.

(closed systems) Use as a fuel PROC3

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Handle substance within a closed system.
Equipment cleaning and maintenance PROC8a Drain down and flush system prior to equipment break-in or maintenance.
Apply vessel entry procedures including use of supplied compressed air.
Storage PROC1
Ensure operation is undertaken outdoors.
Store substance within a closed system.
Transfer via enclosed lines
Storage PROC2
Ensure operation is undertaken outdoors.
Store substance within a closed system. Transfer via enclosed lines
Section 2.2 Control of environmental exposure
Product characteristics
Not applicable
Duration, frequency and amount
Not applicable
Environmental factors not influenced by risk management
Not applicable
Other given operational conditions affecting environmental exposure
No exposure assessment presented for the environment [G40]
Technical conditions and measures at process level (source) to prevent release
Not applicable
Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil
Not applicable
Organisation measures to prevent/limit release from site
Not applicable
Conditions and measures related to municipal sewage treatment plant
Not applicable
Conditions and measures related to external treatment of waste for disposal
Not applicable
Conditions and measures related to external recovery of waste
Not applicable

Europe - BE

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Section 3 Exposure Estimation	
3.1. Health	
the operational conditions/risk management r	ed the applicable exposure limits (given in section 8 of the SDS) when measures given in section 2 are implemented.[G29] te workplace exposures unless otherwise indicated [G21]
3.2. Environment	
Not applicable	
Section 4 Guidance to check compliance wit	h the Exposure Scenario
4.1. Health	
Risk Management Measures are based on qua	perational Conditions are adopted, then users should ensure that risks
4.2. Environment	
Not applicable	
Section 1 Exposure Scenario Title	
Title:	
Functional Fluids - Industrial	
Use Descriptor	
Sector(s) of Use	SU3
Process Categories	PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9
Environmental Release Categories	ERC7
Specific Environmental Release Category	ESVOC 7.13a.v1
Processes, tasks, activities covered	
Use as functional fluids e.g. cable oils, transfequipment including maintenance and related	fer oils, coolants, insulators, refrigerants, hydraulic fluids in industrial I material transfers.
Section 2 Operational conditions and risk ma	inagement measures

Section 2.1 Control of worker exposure

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Product Characteristic

Liquid

Duration, frequency and amount

Covers daily exposures up to 8 hours (unless stated differently)[G2] Covers percentage substance in the product up to 100 %[G13]

Other given operational conditions affecting workers exposure

Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes use at not more than 20°C above ambient temperature[G15]

Contributing Scenarios/ Specific Risk Management Measures and Operating Conditions (only required controls to demonstrate safe use listed)

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. **Bulk transfers (closed systems) PROC1**

Transfer via enclosed lines

Bulk transfers (closed systems) PROC2

Transfer via enclosed lines Drum/batch transfers PROC8b Use

drum pumps.

Filling of articles/equipment (closed systems) PROC9

Fill containers/cans at dedicated fill points supplied with local extract ventilation. Filling / preparation of equipment from drums or containers PROC8a Provide extract ventilation to material transfer points and other openings. General exposures (closed systems) PROC2 No

other specific measures identified.

General exposures (closed systems) PROC3 No

other specific measures identified.

General exposures (open systems) PROC4

Provide extract ventilation to points where emissions occur.

General exposures (open systems) Operation is carried out at elevated temperature (> 20°C above ambient temperature). PROC4

Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. Restrict area of openings to equipment. **Remanufacture of reject articles PROC9** No other specific measures identified.

Equipment maintenance PROC8a

Drain down and flush system prior to equipment break-in or maintenance.

Transfer via enclosed lines

Storage PROC1

Store substance within a closed system.

Storage PROC2

Store substance within a closed system.

Section 2.2 Control of environmental exposure

Europe - BE

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duct characteristics
applicable
ration, frequency and amount
applicable
ironmental factors not influenced by risk management
applicable
er given operational conditions affecting environmental exposure
exposure assessment presented for the environment [G40]
hnical conditions and measures at process level (source) to prevent release
applicable
hnical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil
applicable
anisation measures to prevent/limit release from site
applicable
nditions and measures related to municipal sewage treatment plant
applicable
ditions and measures related to external treatment of waste for disposal
applicable
ditions and measures related to external recovery of waste
applicable
tion 3 Exposure Estimation
. Health
dicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when
operational conditions/risk management measures given in section 2 are implemented.[G29]
ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]
. Environment
applicable
tion 4 Guidance to check compliance with the Exposure Scenario
. Health
ilable hazard data do not support the need for a DNEL to be established for other health effects.[G36] Management Measures are based on qualitative risk characterisation. [G37] ere other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risk

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are managed to at least equivalent levels.[G23] 4.2. Environment Not applicable Section 1 Exposure Scenario Title Title: Use in laboratories - Industrial **Use Descriptor** Sector(s) of Use SU3 PROC10, PROC15 **Process Categories Environmental Release Categories** ERC2, ERC4 Specific Environmental Release Category Processes, tasks, activities covered Use of the substance within laboratory settings, including material transfers and equipment cleaning. Section 2 Operational conditions and risk management measures Section 2.1 Control of worker exposure **Product Characteristic** Liquid Duration, frequency and amount Covers daily exposures up to 8 hours (unless stated differently)[G2] Covers percentage substance in the product up to 100 %[G13] Other given operational conditions affecting workers exposure Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes use at not more than 20°C above ambient temperature[G15] **Contributing Scenarios/ Specific Risk Management Measures and Operating Conditions**

(only required controls to demonstrate safe use listed)

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. Laboratory activities PROC15

No other specific measures identified. Cleaning

PROC10

provide a good standard of controlled ventilation (10 to 15 air changes per hour).

Section 2.2 Control of environmental exposure

Product characteristics

Not applicable

Duration, frequency and amount

Not applicable

Environmental factors not influenced by risk management

Organisation measures to prevent/limit release from site

Not applicable

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29] The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

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Not applicable				
Section 4 Guidance to check compliance with the Exposure Scenario				
4.1. Health				
Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37]				
Section 1 Exposure Scenario Title				
Title:				
Polymer processing - Industrial				
Use Descriptor				
Sector(s) of Use	SU10, SU3			
Process Categories	PROC1, PROC13, PROC14, PROC2, PROC21, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9			
Environmental Release Categories	ERC4			
Specific Environmental Release Category				
Processes, tasks, activities covered				
Processing of formulated polymers including material transfers, additives handling (e.g. pigments, stabilisers, fillers, plasticisers, etc.), moulding, curing and forming activities, material re-works, storage and associated maintenance.				
Section 2 Operational conditions and risk manage	ement measures			
Section 2.1 Control of worker exposure				
Product Characteristic				
Liquid				
Duration, frequency and amount				
Covers daily exposures up to 8 hours (unless stated differently)[G2]				
Covers percentage substance in the product up to 100 %[G13]				
Other given operational conditions affecting workers exposure				

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Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes use at not more than 20°C above ambient temperature[G15]		
Contributing Scenarios/		
Specific Risk Management Measures and Operating Conditions		
(only required controls to demonstrate safe use listed)		

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General measures (Flammable Liquid) Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level. Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. Bulk transfers (closed systems) PROC1 No other specific measures identified. Bulk transfers (closed systems) PROC2 No other specific measures identified. **Bulk transfers PROC8b** No other specific measures identified. **Bulk weighing PROC1** No other specific measures identified. **Bulk weighing PROC2** No other specific measures identified. Small scale weighing PROC9 Ensure material transfers are under containment or extract ventilation. Additive premixing PROC3 No other specific measures identified. Additive premixing PROC4 No other specific measures identified. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23] 4.2. Environment Not applicable Not applicable Other given operational conditions affecting environmental exposure No exposure assessment presented for the environment [G40] Technical conditions and measures at process level (source) to prevent release Not applicable Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil

Not applicable

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Additive premi	-
	l transfers are under containment or extract ventilation.
	out activities involving exposure for more than 4 hours.
Bulk transfers F	
	ce within a closed system.
Calendering (in temperature). Production of a 15 air changes p provide a good hour). Injection controlled vent PROC21 provide per hour). Equip provide a good Storage PROC2	standard of controlled ventilation (10 to 15 air changes per hour). cluding Banburys) Operation is carried out at elevated temperature (> 20°C above ambient PROC6 provide a good standard of controlled ventilation (10 to 15 air changes per hour). rticles by dipping and pouring PROC13 provide a good standard of controlled ventilation (10 to per hour). Extrusion and masterbatching PROC14 standard of controlled ventilation (10 to 15 air changes per moulding of articles PROC14 provide a good standard of ilation (10 to 15 air changes per hour). Finishing operations e a good standard of controlled ventilation (10 to 15 air changes poment maintenance PROC8a standard of controlled ventilation (10 to 15 air changes per hour).
	ntrol of environmental exposure
Product charact	·
Not applicable	
Duration, frequ	ency and amount
Not applicable	
Environmental	factors not influenced by risk management
Not applicable	
Other given op	erational conditions affecting environmental exposure
No exposure as	sessment presented for the environment [G40]
Technical condi	tions and measures at process level (source) to prevent release
Not applicable	
Technical onsite	e conditions and measures to reduce or limit discharges, air emissions and releases to soil
Not applicable	
Organisation m	easures to prevent/limit release from site
Not applicable	
Conditions and	measures related to municipal sewage treatment plant
Not applicable	

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Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37]

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title	
Title:	
Water treatment chemicals - Industrial	
Use Descriptor	
Sector(s) of Use	SU3
Process Categories	PROC1, PROC13, PROC2, PROC3, PROC4, PROC8a, PROC8b
Environmental Release Categories	ERC3, ERC4
Specific Environmental Release Category	
Processes, tasks, activities covered	

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Covers the use of the substance for the treatment of water at industrial facilities in open and closed systems

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product Characteristic

Liquid

Duration, frequency and amount

Covers daily exposures up to 8 hours (unless stated differently)[G2] Covers percentage substance in the product up to 100 %[G13]

Other given operational conditions affecting workers exposure

Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes use at not more than 20°C above ambient temperature[G15]

Contributing Scenarios/ Specific Risk Management Measures and Operating Conditions (only required controls to demonstrate safe use listed)

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. **Bulk transfers Use in contained systems PROC2** No other specific measures identified. **Drum/batch transfers PROC8b** Use drum pumps.

General exposures (closed systems) PROC3

No other specific measures identified. General

exposures (open systems) PROC4 No other

specific measures identified.

Pouring from small containers PROC13

Provide extract ventilation to points where emissions occur.

Equipment maintenance PROC8a

Drain down and flush system prior to equipment break-in or maintenance.

Storage PROC1

Store substance within a closed system.

Section 2.2 Control of environmental exposure

Product characteristics

Not applicable

Duration, frequency and amount

Not applicable

Environmental factors not influenced by risk management

Not applicable

Other given operational conditions affecting environmental exposure

No exposure assessment presented for the environment [G40]

Technical conditions and measures at process level (source) to prevent release

Not applicable

Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil

Not applicable

Organisation measures to prevent/limit release from site

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Not applicable

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37]

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title		
Title:		
Use in Coatings - Professional		
Use Descriptor		
Sector(s) of Use	SU22	
Process Categories	PROC1, PROC10, PROC11, PROC13, PROC15, PROC19, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b	
Environmental Release Categories	ERC8A, ERC8D	

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Specific Environmental Release Category Processes, tasks, activities covered Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, brush, spreader by hand or similar methods, and film formation) and equipment cleaning, maintenance and associated laboratory activities. Section 2 Operational conditions and risk management measures Section 2.1 Control of worker exposure **Product Characteristic** Liquid Duration, frequency and amount Covers daily exposures up to 8 hours (unless stated differently)[G2] Covers percentage substance in the product up to 100 %[G13] Other given operational conditions affecting workers exposure Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes use at not more than 20°C above ambient temperature[G15] **Contributing Scenarios/ Specific Risk Management Measures and Operating Conditions** (only required controls to demonstrate safe use listed)

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. **General exposures (closed systems) PROC1** Handle substance within a closed system.

Filling / preparation of equipment from drums or containers Use in contained systems PROC2 Handle substance within a closed system.

General exposures (closed systems) Use in contained systems PROC2 Handle substance within a closed system.

Ensure material transfers are under containment or extract ventilation.

Preparation of material for application Use in contained batch processes PROC3

Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. **Film formation - air drying Outdoor. PROC4** Avoid carrying out operation for more than 4 hours. or Wear a respirator conforming to EN140 with Type A filter or better.

Film formation - air drying Indoor PROC4

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Provide extract ventilation to points where emissions occur. Preparation of material for application Indoor PROC5 provide a good standard of controlled ventilation (10 to 15 air changes per hour). or Wear a respirator conforming to EN140 with Type A filter or better. Preparation of material for application Outdoor. PROC5 Wear a respirator conforming to EN140 with Type A filter or better. Material transfers Drum/batch transfers PROC8a provide a good standard of general ventilation Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Avoid carrying out operation for more than 1 hour or Wear a respirator conforming to EN140 with Type A filter or better. Material transfers Drum/batch transfers Dedicated facility PROC8b Provide extract ventilation to material transfer points and other openings. Roller, spreader, flow application Indoor PROC10 provide a good standard of controlled ventilation (10 to 15 air changes per hour). Roller, spreader, flow application Outdoor. PROC10 Wear a respirator conforming to EN140 with Type A filter or better. Manual Spraying Indoor PROC11 Carry out in a vented booth or extracted enclosure. Wear a respirator conforming to EN140 with Type A filter or better. Manual Spraying Outdoor. PROC11 Wear a respirator conforming to EN140 with Type A filter or better. Dipping, immersion and pouring Indoor PROC13 Provide extract ventilation to points where emissions occur. Avoid manual contact with wet work pieces. Dipping, immersion and pouring Outdoor. PROC13 Ensure operation is undertaken outdoors. Avoid manual contact with wet work pieces. Laboratory activities PROC15 provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Hand application - finger paints, pastels, adhesives Indoor PROC19 provide a good standard of general ventilation Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Wear a respirator conforming to EN140 with Type A filter or better. Hand application - finger paints, pastels, adhesives Outdoor. PROC19 Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140 with Type A filter or better. Section 2.2 Control of environmental exposure Product characteristics Not applicable Duration, frequency and amount

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Not applicable

Environmental factors not influenced by risk management

Not applicable

Other given operational conditions affecting environmental exposure

No exposure assessment presented for the environment [G40]

Technical conditions and measures at process level (source) to prevent release

Not applicable

Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil

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Not applicable

Organisation measures to prevent/limit release from site

Not applicable

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Available hazard data do not support the need for a DNEL to be established for other health effects.[G36]

Risk Management Measures are based on qualitative risk characterisation. [G37]

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title				
Title:				
Use in Cleaning Agents - Professional				
Use Descriptor				
Sector(s) of Use	SU22			
Process Categories	PROC1, PROC10, PROC11, PROC13, PROC19, PROC2,			

	PROC3, PROC4, PROC8a, PROC8b			
Environmental Release Categories	ERC8A, ERC8D			
Specific Environmental Release Category				
Processes, tasks, activities covered				
	cluding pouring/unloading from drums or containers; and nase and cleaning activities (including spraying, brushing,			
Section 2 Operational conditions and risk management measures				
Section 2.1 Control of worker exposure				
Product Characteristic				
Liquid				
Duration, frequency and amount				
Covers daily exposures up to 8 hours (unless stated differently)[G2] Covers percentage substance in the product up to 100 %[G13]				
Other given operational conditions affecting workers exposure				
Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes use at not more than 20°C above ambient temperature[G15]				
Contributing Scenarios/				
Specific Risk Management Measures and Operating Conditions (only required controls to demonstrate safe use listed)				

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. **Filling / preparation of equipment from drums or containers PROC8b** provide a good standard of general ventilation Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Avoid carrying out operation for more than 1 hour or

Wear a respirator conforming to EN140 with Type A filter or better.

Automated process with (semi) closed systems Use in contained systems PROC2

Avoid carrying out operation for more than 4 hours. or

Wear a respirator conforming to EN140 with Type A filter or better.

Automated process with (semi) closed systems Drum/batch transfers Use in contained systems PROC3

Avoid carrying out operation for more than 1 hour

or

Wear a respirator conforming to EN140 with Type A filter or better.

Semi-automated process (e.g.: Semi-automatic application of floor care and maintenance products) PROC4

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provide a good standard of general ventilation Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Avoid carrying out operation for more than 4 hours. or Wear a respirator conforming to EN140 with Type A filter or better. Filling / preparation of equipment from drums or containers PROC8a Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140 with Type A filter or better. Manual Surfaces Cleaning Dipping, immersion and pouring PROC13 provide a good standard of general ventilation Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Avoid carrying out operation for more than 4 hours. Manual Surfaces Cleaning PROC13 Wear a respirator conforming to EN140 with Type A filter or better. Cleaning with low-pressure washers Rolling, Brushing No spraying PROC10 provide a good standard of general ventilation Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Limit the substance content in the mixture to 5 %. Cleaning with high pressure washers Spraying Indoor PROC11 provide a good standard of general ventilation Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Limit the substance content in the mixture to 1 %. Cleaning with high pressure washers Spraying Outdoor. PROC11 Limit the substance content in the mixture to 1 %. Avoid carrying out operation for more than 4 hours. or Wear a respirator conforming to EN140 with Type A filter or better. Manual Surfaces Cleaning Spraying PROC10 Ensure doors and windows are opened. Avoid carrying out operation for more than 1 hour Manual Surfaces Cleaning PROC10 Wear a respirator conforming to EN140 with Type A filter or better. Ad hoc manual application via trigger sprays, dipping, etc. Rolling, Brushing PROC10 Provide extract ventilation to points where emissions occur. Limit the substance content in the mixture to 25 %. Avoid carrying out operation for more than 4 hours. or Wear a respirator conforming to EN140 with Type A filter or better. OR Limit the substance content in the mixture to 25 %. Wear a respirator conforming to EN140 with Type A filter or better.
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Application of cleaning products in closed systems Outdoor. PROC4 Avoid carrying out operation for more than 1 hour or Wear a respirator conforming to EN140 with Type A filter or better. Cleaning of medical devices PROC4 Provide extract ventilation to points where emissions occur. Avoid carrying out operation for more than 4 hours. or Wear a respirator conforming to EN140 with Type A filter or better.

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Section 2.2 Control of environmental exposure

Product characteristics

Not applicable

Duration, frequency and amount

Not applicable

Environmental factors not influenced by risk management

Not applicable

Other given operational conditions affecting environmental exposure

No exposure assessment presented for the environment [G40]

Technical conditions and measures at process level (source) to prevent release

Not applicable

Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil

Not applicable

Organisation measures to prevent/limit release from site

Not applicable

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

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Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37] Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title	
Title:	
Use as binders and release agents - Professional	
Use Descriptor	
Sector(s) of Use	SU22
Process Categories	PROC1, PROC10, PROC11, PROC14, PROC2, PROC3, PROC4, PROC6, PROC8a, PROC8b
Environmental Release Categories	ERC8A, ERC8D
Specific Environmental Release Category	
Processes tasks activities covered	

Processes, tasks, activities covered

Covers the use as binders and release agents including material transfers, mixing, application by spraying, brushing, and handling of waste.

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product Characteristic

Liquid

Duration, frequency and amount

Covers daily exposures up to 8 hours (unless stated differently)[G2]

Covers percentage substance in the product up to 100 %[G13]

Other given operational conditions affecting workers exposure

Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes

use at not more than 20°C above ambient temperature[G15]

Contributing Scenarios/

Specific Risk Management Measures and Operating Conditions

(only required controls to demonstrate safe use listed)

CLEANER 14 Supercedes Date: 08-Sep-2017 Revision Date 25-May-2018 Revision Number 2

General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. **Material transfers (closed systems) PROC1**

Transfer via enclosed lines

Material transfers (closed systems) PROC2

Transfer via enclosed lines

Material transfers (closed systems) PROC3

Transfer via enclosed lines

Drum/batch transfers PROC8b Use

drum pumps.

Mixing operations (closed systems) PROC3

Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.

Mixing operations (open systems) PROC4

Provide enhanced general ventilation by mechanical means.

Mold forming PROC14

Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. Casting operations (open systems) Operation is carried out at elevated temperature (> 20°C above ambient temperature). PROC6

Provide extract ventilation to points where emissions occur.

Spraying Machine PROC11

Minimise exposure by extracted full enclosure for the operation or equipment.

Roller application or brushing PROC10

Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.

Spraying Manual PROC11

Carry out in a vented booth or extracted enclosure.

Storage PROC1 No other specific measures identified.

Storage PROC2

No other specific measures identified.

Section 2.2 Control of environmental exposure

CLEANER 14 Supercedes Date: 08-Sep-2017 Revision Date 25-May-2018 Revision Number 2

Product characteristics

Not applicable

Duration, frequency and amount

Not applicable

Environmental factors not influenced by risk management

Not applicable

Other given operational conditions affecting environmental exposure

No exposure assessment presented for the environment [G40]

Technical conditions and measures at process level (source) to prevent release

Not applicable

Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil

Not applicable

Organisation measures to prevent/limit release from site

Not applicable

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

CLEANER 14 Supercedes Date: 08-Sep-2017 Revision Date 25-May-2018 Revision Number 2

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37]

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title	
Title:	
Agrochemical uses - Professional	
Use Descriptor	
Sector(s) of Use	SU22
Process Categories	PROC1, PROC11, PROC13, PROC2, PROC4, PROC8a, PROC8b
Environmental Release Categories	ERC8A, ERC8D
Specific Environmental Release Category	
Processes, tasks, activities covered	
Use as an agrochemical excipient for application by equipment clean-downs and disposal.	manual or machine spraying, smokes and fogging; including
Section 2 Operational conditions and risk manageme	nt measures
Section 2.1 Control of worker exposure	
Product Characteristic	
Liquid	
Duration, frequency and amount	
Covers daily exposures up to 8 hours (unless stated differently)[G2]	
Covers percentage substance in the product up to 100 %[G13]	
Other sizes exerctional conditions offecting workers even and	

Other given operational conditions affecting workers exposure

CLEANER 14 Supercedes Date: 08-Sep-2017 Revision Date 25-May-2018 Revision Number 2

Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes use at not more than 20°C above ambient temperature[G15] Specific Risk Management Measures and Operating Conditions (only required controls to demonstrate safe use listed) General measures (Flammable Liquid) Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level. Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. Transfer from/pouring from containers PROC3B Ensure operation is undertaken outdoors. Mixing operations (open systems) PROC4 Ensure operation is undertaken outdoors. Spraying/fogging by manual application PROC11 Apply within a vented cab supplied with filtered air under positive pressure and with a protection factor of >20. Ad hoce manual application PROC11 Apply within a vented cab supplied with filtered air under positive pressure and with a protection factor of >20. Ad hoce manual application PROC13 Apply within a vented cab supplied with filtered air under positive pressure and with a protection factor of >20. Ad hoce manual application NROC13 Kear a respirator conforming to EN140 with Type A filter or better. Wear a respirator conforming to EN140 with Type A filter or better. Wear a respirator conforming to EN140 with Type A filter or better. Wear a re	
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Wear suitable gloves tested to EN374. Equipment cleaning and maintenance PROC8a Limit the substance content in the mixture to 25 %. Avoid carrying out operation for more than 1 hour	outdoors.
Equipment cleaning and maintenance PROC8a Limit the substance content in the mixture to 25 %. Avoid carrying out operation for more than 1 hour	Wear a respirator conforming to EN140 with Type A filter or better.
Limit the substance content in the mixture to 25 %. Avoid carrying out operation for more than 1 hour	Wear suitable gloves tested to EN374.
Avoid carrying out operation for more than 1 hour	Equipment cleaning and maintenance PROC8a
	Limit the substance content in the mixture to 25 %.
Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.	Avoid carrying out operation for more than 1 hour
	Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.

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Disposal of wastes PROC8a	
Ensure operation is undertaken outdoors.	
imit the substance content in the mixture to 25 %. Avoid carrying out operation for more than 1 hour	
Wear suitable gloves tested to EN374.	
Storage PROC1	
Store substance within a closed system.	
Storage PROC2	
Store substance within a closed system.	
Section 2.2 Control of environmental exposure	
Product characteristics	
Not applicable	
Duration, frequency and amount	
Not applicable	
Environmental factors not influenced by risk management	
Not applicable	
Other given operational conditions affecting environmental exposure	
No exposure assessment presented for the environment [G40]	
Fechnical conditions and measures at process level (source) to prevent release	
Not applicable	
Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil	
Not applicable	
Organisation measures to prevent/limit release from site	
Not applicable	
Conditions and measures related to municipal sewage treatment plant	
Not applicable	
Conditions and measures related to external treatment of waste for disposal	
Not applicable	
Conditions and measures related to external recovery of waste	
Not applicable	
Soction 2 Exposure Estimation	

Section 3 Exposure Estimation

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3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29] The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37]

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title		
Title:		
Use as a fuel - Professional		
Use Descriptor		
Sector(s) of Use	SU22	
Process Categories	PROC1, PROC16, PROC2, PROC3, PROC8a, PROC8b	
Environmental Release Categories	ERC9A, ERC9B	
Specific Environmental Release Category		
Processes, tasks, activities covered		
Covers the use as a fuel (or fuel additive), and includes activities associated with its transfer, use, equipment maintenance and handling of waste.		
Section 2 Operational conditions and risk management measures		
Section 2.1 Control of worker exposure		
Product Characteristic		
Liquid		
Duration, frequency and amount		

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Covers daily exposures up to 8 hours (unless stated differently)[G2] Covers percentage substance in the product up to 100 %[G13]

Other given operational conditions affecting workers exposure

Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes

use at not more than 20°C above ambient temperature[G15]

Contributing Scenarios/

Specific Risk Management Measures and Operating Conditions

(only required controls to demonstrate safe use listed)

General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. **Bulk transfers PROC8b**

Ensure operation is undertaken outdoors.

Handle substance within a closed system.

Clear transfer lines prior to de-coupling.

Drum/batch transfers PROC8b

Use drum pumps or carefully pour from container.

refuelling PROC8b

Use drum pumps or carefully pour from container.

Use as a fuel PROC1

Handle substance within a closed system.

Use as a fuel PROC2

Handle substance within a closed system.

Use as a fuel (closed systems) PROC3 Handle

substance within a closed system.

Use as a fuel PROC16

Handle substance within a closed system.

Equipment cleaning and maintenance PROC8a

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Drain down system prior to equipment break-in or maintenance.
Apply vessel entry procedures including use of supplied compressed air.
Retain drain downs in sealed storage pending disposal or for subsequent recycle.
Storage PROC1
Ensure operation is undertaken outdoors.
Store substance within a closed system. Transfer via enclosed lines
Section 2.2 Control of environmental exposure
Product characteristics
Not applicable
Duration, frequency and amount
Not applicable
Environmental factors not influenced by risk management
Not applicable
Other given operational conditions affecting environmental exposure
No exposure assessment presented for the environment [G40]
Technical conditions and measures at process level (source) to prevent release
Not applicable
Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil
Not applicable
Organisation measures to prevent/limit release from site
Not applicable
Conditions and measures related to municipal sewage treatment plant
Not applicable
Conditions and measures related to external treatment of waste for disposal
Not applicable
Conditions and measures related to external recovery of waste
Not applicable
Section 3 Exposure Estimation
3.1. Health
Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

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The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37]

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title	
Title:	
Functional Fluids - Professional	
Use Descriptor	
Sector(s) of Use	SU22
Process Categories	PROC1, PROC2, PROC20, PROC3, PROC8a, PROC9
Environmental Release Categories	ERC9A, ERC9B
Specific Environmental Release Category	ESVOC 9.13b.v1

Processes, tasks, activities covered

Use as functional fluids e.g. cable oils, transfer oils, insulators, refrigerants, hydraulic fluids in closed professional equipment including incidental exposures during maintenance and related material transfers.

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product Characteristic

Liquid

Duration, frequency and amount

Covers daily exposures up to 8 hours (unless stated differently)[G2] Covers percentage substance in the product up to 100 %[G13]

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Other given operational conditions affecting workers exposure

Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes

use at not more than 20°C above ambient temperature[G15]

Contributing Scenarios/

Specific Risk Management Measures and Operating Conditions

(only required controls to demonstrate safe use listed)

General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. **Drum/batch transfers PROC8a**

Use drum pumps or carefully pour from container.

Transfer from/pouring from containers PROC9 Use

drum pumps or carefully pour from container.

Filling / preparation of equipment from drums or containers PROC9 Use

drum pumps or carefully pour from container.

Wear suitable gloves tested to EN374.

General exposures (closed systems) PROC1

Handle substance within a closed system.

General exposures (closed systems) PROC2 No

other specific measures identified.

General exposures (closed systems) PROC3 No

other specific measures identified.

Operation of equipment containing engine oils and similar PROC20 No

other specific measures identified.

Operation is carried out at elevated temperature (> 20°C above ambient temperature). Operation of equipment containing engine oils and similar PROC20

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Handle substance within a predominantly closed system provided with extract ventilation.
Remanufacture of reject articles PROC9
Provide enhanced general ventilation by mechanical means.
Equipment maintenance PROC8a
Drain down system prior to equipment break-in or maintenance.
Storage PROC1
Store substance within a closed system.
Storage PROC2 Store substance within a closed system.
Store substance within a closed system. Section 2.2 Control of environmental exposure
Product characteristics
Not applicable
Duration, frequency and amount
Not applicable
Environmental factors not influenced by risk management
Not applicable
Other given operational conditions affecting environmental exposure
No exposure assessment presented for the environment [G40]
Technical conditions and measures at process level (source) to prevent release
Not applicable
Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil
Not applicable
Organisation measures to prevent/limit release from site
Not applicable
Conditions and measures related to municipal sewage treatment plant
Not applicable
Conditions and measures related to external treatment of waste for disposal
Not applicable
Conditions and measures related to external recovery of waste
Not applicable
Section 3 Exposure Estimation
3.1. Health

CLEANER 14 Supercedes Date: 08-Sep-2017 Revision Date 25-May-2018 Revision Number 2

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29] The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37]

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title		
Title:		
De-icing and anti-icing applications - Professional		
Use Descriptor		
Sector(s) of Use	SU22	
Process Categories	PROC1, PROC10, PROC11, PROC2, PROC8a, PROC8b	
Environmental Release Categories	ERC8D	
Specific Environmental Release Category		
Processes, tasks, activities covered		
Ice prevention and de-icing of vehicles, aircraft and other equipment by spraying.		
Section 2 Operational conditions and risk management measures		
Section 2.1 Control of worker exposure		
Product Characteristic		
Liquid		
Duration, frequency and amount		
Covers daily exposures up to 8 hours (unless stated differently)[G2]		
Covers percentage substance in the product up to 100 %[G13]		

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Other given operational conditions affecting workers exposure

Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes

use at not more than 20°C above ambient temperature[G15]

Contributing Scenarios/

Specific Risk Management Measures and Operating Conditions

(only required controls to demonstrate safe use listed)

General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. **Bulk transfers PROC8b**

Ensure operation is undertaken outdoors.

Avoid carrying out operation for more than 1 hour

Wear suitable gloves tested to EN374.

Material transfers PROC8b

Ensure operation is undertaken outdoors.

Avoid carrying out operation for more than 1 hour

Wear suitable gloves tested to EN374.

Spraying/fogging by machine application Operation is carried out at elevated temperature (> 20°C above ambient temperature). PROC11

Limit the substance content in the mixture to 5 %.

Avoid carrying out operation for more than 1 hour

Wear chemically resistant gloves (tested to EN374) in combination with specific activity training.

Equipment cleaning and maintenance PROC10 Limit

the substance content in the mixture to 1 %.

Avoid carrying out operation for more than 4 hours.

Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training.

Section 2.2 Control of environmental exposure

Product characteristics

Not applicable

Duration, frequency and amount

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Not applicable
Environmental factors not influenced by risk management
Not applicable
Other given operational conditions affecting environmental exposure
No exposure assessment presented for the environment [G40]
Technical conditions and measures at process level (source) to prevent release
Not applicable
Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil
Not applicable
Organisation measures to prevent/limit release from site
Not applicable
Conditions and measures related to municipal sewage treatment plant
Not applicable
Conditions and measures related to external treatment of waste for disposal
Not applicable
Conditions and measures related to external recovery of waste
Not applicable
Section 3 Exposure Estimation
3.1. Health
Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29] The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]
3.2. Environment
Not applicable
Section 4 Guidance to check compliance with the Exposure Scenario
4.1. Health
Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37] Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]
4.2. Environment
Not applicable
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Section 1 Exposure Scenario Title		
Title:		
Road and construction applications		
Use Descriptor		
Sector(s) of Use	SU22	
Process Categories	PROC1, PROC10, PROC11, PROC13, PROC2, PROC8a, PROC8b, PROC9	
Environmental Release Categories	ERC8D, ERC8F	
Specific Environmental Release Category		
Processes, tasks, activities covered		
Bulk loading (including marine vessel/barge, rail/road car a	and IBC loading)	
Section 2 Operational conditions and risk management r	neasures	
Section 2.1 Control of worker exposure		
Product Characteristic		
Liquid		
Duration, frequency and amount		
Covers daily exposures up to 8 hours (unless stated differently)[G2] Covers percentage substance in the product up to 100 %[G13]		
Other given operational conditions affecting workers exposure		
Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes use at not more than 20°C above ambient temperature[G15]		
Contributing Scenarios/		
Specific Risk Management Measures and Operating Conditions		
(only required controls to demonstrate safe use listed)		

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. Drum/batch transfers Non-dedicated facility PROC8a

Wear suitable respiratory protection (conforming to EN140 with Type A filter or better) and gloves (type EN374) if regular skin contact likely.

Drum/batch transfers Dedicated facility PROC8b Use

dedicated equipment.

Clear transfer lines prior to de-coupling.

Wear suitable respiratory protection (conforming to EN140 with Type A filter or better) and gloves (type EN374) if regular skin contact likely.

Roller application or brushing PROC10 Ensure

operation is undertaken outdoors.

Wear suitable respiratory protection (conforming to EN140 with Type A filter or better) and gloves (type EN374) if regular skin contact likely.

Spraying/fogging by machine application PROC11 Ensure

operation is undertaken outdoors.

Wear suitable respiratory protection (conforming to EN140 with Type A filter or better) and gloves (type EN374) if regular skin contact likely.

Dipping, immersion and pouring PROC13

Ensure operation is undertaken outdoors.

Wear suitable respiratory protection (conforming to EN140 with Type A filter or better) and gloves (type EN374) if regular skin contact likely.

Wear suitable gloves tested to EN374.

Equipment cleaning and maintenance PROC8a Ensure

operation is undertaken outdoors.

Avoid carrying out operation for more than 1 hour

Retain drain downs in sealed storage pending disposal or for subsequent recycle.

Wear suitable gloves tested to EN374.

Section 2.2 Control of environmental exposure

Product characteristics

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Not applicable
Duration, frequency and amount
Not applicable
Environmental factors not influenced by risk management
Not applicable
Other given operational conditions affecting environmental exposure
No exposure assessment presented for the environment [G40]
Technical conditions and measures at process level (source) to prevent release
Not applicable
Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil
Not applicable
Organisation measures to prevent/limit release from site
Not applicable
Conditions and measures related to municipal sewage treatment plant
Not applicable
Conditions and measures related to external treatment of waste for disposal
Not applicable
Conditions and measures related to external recovery of waste
Not applicable
Section 3 Exposure Estimation
3.1. Health
Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]
The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]
3.2. Environment
Not applicable
Section 4 Guidance to check compliance with the Exposure Scenario
4.1. Health
Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37] Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

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4.2. Environment

Not applicable

Section 1 Exposure Scenario Title				
Title:				
Use in laboratories - Professional				
Use Descriptor				
Sector(s) of Use	SU22			
Process Categories	PROC10, PROC15			
Environmental Release Categories	ERC8A			
Specific Environmental Release Category				
Processes, tasks, activities covered				
Use of small quantities within laboratory settings, including	g material transfers and equipment cleaning.			
Section 2 Operational conditions and risk management n	neasures			
Section 2.1 Control of worker exposure				
Product Characteristic				
Liquid				
Duration, frequency and amount				
Covers daily exposures up to 8 hours (unless stated differently)[G2] Covers percentage substance in the product up to 100 %[G13]				
Other given operational conditions affecting workers exp	osure			
Assumes a good basic standard of occupational hygiene is use at not more than 20°C above ambient temperature[G1				
Contributing Scenarios/ Specific Risk Management Measures and Operating Cond (only required controls to demonstrate safe use listed)	itions			

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. **Laboratory activities PROC15**

No other specific measures identified.

Cleaning PROC10

provide a good standard of controlled ventilation (10 to 15 air changes per hour).

Avoid carrying out operation for more than 1 hour

Ensure the ventilation system is regularly maintained and tested.

Section 2.2 Control of environmental exposure

Product characteristics

Not applicable

Duration, frequency and amount

Not applicable

Environmental factors not influenced by risk management

Not applicable

Other given operational conditions affecting environmental exposure

No exposure assessment presented for the environment [G40]

Technical conditions and measures at process level (source) to prevent release

Not applicable

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Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil

Not applicable

Organisation measures to prevent/limit release from site

Not applicable

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Available hazard data do not support the need for a DNEL to be established for other health effects.[G36]

Risk Management Measures are based on qualitative risk characterisation. [G37]

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title

Title:

Explosives manufacture & use

Use Descriptor

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Sector(s) of Use	SU22			
Process Categories	PROC1, PROC3, PROC5, PROC8a, PROC8b			
Environmental Release Categories	ERC8E			
Specific Environmental Release Category				
Processes, tasks, activities covered				
Covers exposures arising from the manufacture and use o	f slurry explosives (including materials transfer, mixing and			
charging) and equipment cleaning.				
Section 2 Operational conditions and risk management n	neasures			
Section 2.1 Control of worker exposure				
Product Characteristic				
Liquid				
Duration, frequency and amount				
Covers daily exposures up to 8 hours (unless stated differently)[G2]				
Covers percentage substance in the product up to 100 %[G13]				
Other given operational conditions affecting workers exp	osure			
Assumes a good basic standard of occupational hygiene is implemented [G1] Assumes				
use at not more than 20°C above ambient temperature[G15]				
Contributing Scenarios/				
Specific Risk Management Measures and Operating Conditions				
(only required controls to demonstrate safe use listed)				

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level. Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation

of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. **Bulk transfers PROC3**

Handle substance within a closed system.

Drum/batch transfers PROC8a Use drum

pumps.

Mixing operations (closed systems) PROC3 No

other specific measures identified.

Mixing operations (open systems) PROC5

Provide enhanced general ventilation by mechanical means.

Material transfers PROC8a

Avoid carrying out operation for more than 1 hour

Equipment cleaning and maintenance PROC8b

Drain down system prior to equipment break-in or maintenance.

Transfer from/pouring from containers Non-dedicated facility PROC8a Use

drum pumps.

Equipment maintenance PROC8a

Drain down system prior to equipment break-in or maintenance.

Storage PROC1

No other specific measures identified.

Section 2.2 Control of environmental exposure

Product characteristics

Not applicable

Duration, frequency and amount

Not applicable

Environmental factors not influenced by risk management

Not applicable

Other given operational conditions affecting environmental exposure

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No exposure assessment presented for the environment [G40]

Technical conditions and measures at process level (source) to prevent release

Not applicable

Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil

Not applicable

Organisation measures to prevent/limit release from site

Not applicable

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37]

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title

Title:

Water treatment chemicals - Professional

Use Descriptor		
Sector(s) of Use	SU22	
Process Categories	PROC1, PROC13, PROC2, F PROC8b	PROC3, PROC4, PROC8a,
Environmental Release Categories	ERC8F	
Specific Environmental Release Category		
Processes, tasks, activities covered		
Covers the use of the substance for the treatment of wate	in open and closed systems.	
Section 2 Operational conditions and risk management	easures	
Section 2.1 Control of worker exposure		
Product Characteristic		
Liquid		
Duration, frequency and amount		
Covers daily exposures up to 8 hours (unless stated Covers percentage substance in the product up to 100 %[,,,,	
Other given operational conditions affecting workers ex	sure	
Assumes a good basic standard of occupational hygiene is use at not more than 20°C above ambient temperature[G		
Contributing Scenarios/ Specific Risk Management Measures and Operating Con (only required controls to demonstrate safe use listed)	tions	

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances, such as flammability or explosiveness can be controlled by implementing risk management measures at the workplace. It is recommended to follow the recast ATEX Directive 2014/34/EU. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, the risk can be regarded as controlled to an acceptable level.

Use in contained systems. Avoid ignition sources – No Smoking. Handle in well ventilated area to prevent formation of explosive atmosphere. Use equipment and protective systems approved for flammable substances. Restrict line velocity during pumping to avoid generation of electrostatic discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Comply with relevant EU/national regulations. Review SDS for additional advice. Drum/batch transfers PROC8b Use drum pumps.

General exposures (closed systems) PROC3 No

other specific measures identified.

General exposures (open systems) PROC4

provide a good standard of controlled ventilation (10 to 15 air changes per hour).

Transfer via enclosed lines

Pouring from small containers PROC13

Avoid carrying out operation for more than 1 hour

Provide extract ventilation to points where emissions occur.

Equipment maintenance PROC8a

provide a good standard of controlled ventilation (10 to 15 air changes per hour).

Drain down system prior to equipment break-in or maintenance.

Storage PROC1

Store substance within a closed system.

Section 2.2 Control of environmental exposure

Product characteristics

Not applicable

Duration, frequency and amount

Not applicable

Environmental factors not influenced by risk management

Not applicable

Other given operational conditions affecting environmental exposure

No exposure assessment presented for the environment [G40]

Technical conditions and measures at process level (source) to prevent release

Not applicable

Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil

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Not applicable

Organisation measures to prevent/limit release from site

Not applicable

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Available hazard data do not support the need for a DNEL to be established for other health effects.[G36]

Risk Management Measures are based on qualitative risk characterisation. [G37]

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title	
Title:	
Use in Coatings - Consumer	
Use Descriptor	
Sector(s) of Use	SU21
Product Categories	PC01, PC04, PC08, PC09A, PC09B, PC09C, PC15, PC18, PC23, PC24, PC31, PC34

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	· · · · ·		
Environmental Release Categories	ERC8A, ERC8D		
Specific Environmental Release Category	ESVOC 8.3c.v1		
Processes, tasks, activities covered			
Covers the use in coatings (paints, inks, adhesives, operation, application by brush, spray by hand or	etc) including exposures during use (including product transfer and similar methods) and equipment cleaning.		
Section 2 Operational conditions and risk manage	ment measures		
Section 2.1 Control of consumer exposure			
Product Characteristic			
Liquid			
Duration, frequency and amount			
Not applicable			
Other given operational conditions affecting consu	umer exposure		
Not applicable			
Contributing Scenarios/			
Specific Risk Management Measures and Operatin	g Conditions		
(only required controls to demonstrate safe use listed)			

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For flammable substances a selection of the following measures need to be implemented to control unintended ignition of flammable substances. These measures are expected to be suitable to prevent minor accidents which might occur during consumer use. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, it is anticipated that there is no immediate concern as the risk should be controlled to an acceptable level. Use only with adequate ventilation. Avoid ignition sources – No Smoking. Review SDS for additional advice.

Adhesives, sealants Glues, hobby use PC01 Covers concentrations up to 30 % Covers use up to 1 times per day Covers use up to 365 days/yr Covers skin contact area up to 35.73 cm2 For each use event, covers use amounts up to 9 grams Covers use in room size of 20 m³ Covers exposure up to 4 hour(s) Liquid, vapour pressure > 10 kPa at STP. Covers use under typical household ventilation. Covers use at ambient temperatures. Adhesives, sealants Glues, DIY-use (carpet glue, tile glue, wood parquet glue) PC01 Covers concentrations up to 30 % Covers use up to 1 times per day Covers use up to 1 days/yr Covers skin contact area up to 110 cm2 For each use event, covers use amounts up to 6390 grams Covers use under typical household ventilation.

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Covers exposure up to 6 hour(s) Covers use in room size of 20 m³ Covers use at ambient temperatures.

Liquid, vapour pressure > 10 kPa at STP.

Adhesives, sealants Glue from spray PC01

Covers concentrations up to 30 %

Covers use up to 1 times per day

Covers use up to 6 days/yr

Covers skin contact area up to 35.73 cm2

For each use event, covers use amounts up to 85.05 grams Covers use under typical household ventilation.

Covers exposure up to 4 hour(s)Covers use in room size of 20 m^3

Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Adhesives, sealants Sealants PC01

Covers concentrations up to 30 %

Covers use up to 1 times per day

Covers use up to 365 days/yr

Covers skin contact area up to 35.73 cm2 For each use event, covers use amounts up to 75 grams Covers use under typical household ventilation.

Covers exposure up to 1 hour(s) Covers use in room size of 20 m³

Liquid, vapour pressure > 10 kPa at STP.

Covers use at ambient temperatures.

Anti-freeze and de-icing products Washing car window PC04

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Covers concentrations up to 1%

Covers use up to 1 times per day

Covers use up to 365 days/yr

For each use event, covers use amounts up to 0.5 grams Covers use in a one car garage (34 m3) under typical ventilation.

Covers exposure up to 0.02 hour(s) Covers use in room size of 34 m^3

Liquid, vapour pressure > 10 kPa at STP.

Covers use at ambient temperatures.

Covers skin contact area up to 857.5 cm2

Anti-freeze and de-icing products Pouring into radiator PC04

Covers concentrations up to 10 %

Covers use up to 1 times per day

Covers use up to 365 days/yr

Covers skin contact area up to 428 cm2

For each use event, covers use amounts up to 2000 grams Covers use in a one car garage (34 m3) under typical ventilation.

Covers exposure up to 0.17 hour(s) Covers use in room size of 34 m³Liquid, vapour pressure > 10 kPa at STP.

Covers use at ambient temperatures.

Anti-freeze and de-icing products Lock de-icer PC04

Covers concentrations up to 50 %

Covers use up to 1 times per day

Covers use up to 365 days/yr

Covers skin contact area up to 214.4 cm2

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For each use event, covers use amounts up to 4 grams Covers use in a one car garage (34 m3) under typical ventilation. Covers use in room size of 34 m³ Covers exposure up to 0.25 hour(s) Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Biocidal products (e.g. disinfectants, pest control) Laundry and dish washing products PC08 Covers concentrations up to 5 % Covers use up to 1 times per day Covers use up to 365 days/yr Covers skin contact area up to 857.5 cm2 For each use event, covers use amounts up to 15 grams Covers use under typical household ventilation. Covers use in room size of 20 m³ Covers exposure up to 0.5 hour(s) Covers use at ambient temperatures. Liquid, vapour pressure > 10 kPa at STP. Biocidal products (e.g. disinfectants, pest control) Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners) PC08 Covers concentrations up to 5% Covers use up to 1 times per day Covers use up to 128 days/yr Covers skin contact area up to 857.5 cm2 For each use event, covers use amounts up to 27 grams Covers use under typical household ventilation. Europe - BE Page 106 / 154

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Covers exposure up to 0.33 hour(s) Covers use in room size of 20 m³ Covers use at ambient temperatures.

Liquid, vapour pressure > 10 kPa at STP.

Biocidal products (e.g. disinfectants, pest control) Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) PC08 Covers concentrations up to 15 %

Covers use up to 1 times per day

Covers use up to 128 days/yr

Covers skin contact area up to 428 cm2

For each use event, covers use amounts up to 35 grams Covers use under typical household ventilation.

Covers exposure up to 0.17 hour(s) Covers use in room size of 20 m^3 Liquid, vapour pressure > 10 kPa at STP.

Covers use at ambient temperatures.

Coatings and paints, thinners, paint removers Waterborne latex wall paint PC09A

Covers concentrations up to 1.5 %

Covers use up to 1 times per day

Covers use up to 4 days/yr

Covers skin contact area up to 428.75 cm2

For each use event, covers use amounts up to 2760 grams Covers use under typical household ventilation.

Covers use in room size of 20 m³ Covers exposure up to 2.2 hour(s)

Covers use at ambient temperatures.

Liquid, vapour pressure > 10 kPa at STP.

Coatings and paints	, thinners,	paint remove	rs Solvent	rich, high	solid, water	borne paint	PC09A Covers
concentrations up to	27.5 %						

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Covers use up to 1 times per day Covers use up to 6 days/yr Covers skin contact area up to 428.75 cm2 For each use event, covers use amounts up to 744 grams Covers use under typical household ventilation. Covers exposure up to 2.2 hour(s) Covers use in room size of 20 m³ Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Coatings and paints, thinners, paint removers Aerosol spray can PC09A Covers concentrations up to 50 % Covers use up to 1 times per day Covers use up to 2 days/yr For each use event, covers use amounts up to 215 grams Covers use in a one car garage (34 m3) under typical ventilation. Covers exposure up to 0.33 hour(s) Covers use in room size of 34 m³ Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Covers skin contact area up to 857.5 cm2 Coatings and paints, thinners, paint removers Removers (paint-, glue-, wall paper-, sealant-remover) PC09A Covers concentrations up to 50 % Covers use up to 1 times per day Covers use up to 3 days/yr Covers skin contact area up to 857.5 cm2

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For each use event, covers use amounts up to 491 grams Covers use under typical household ventilation.

Covers exposure up to 2 hour(s)

Covers use in room size of 20 m³ Liquid, vapour pressure > 10 kPa at STP.

Covers use at ambient temperatures.

Fillers, putties, plasters, modelling clay fillers and Putty PC09B

Covers concentrations up to 2 %

Covers use up to 1 times per day

Covers use up to 12 days/yr

Covers skin contact area up to 35.73 cm2

For each use event, covers use amounts up to 85 grams Covers use under typical household ventilation.

Covers exposure up to 4 hour(s)

Covers use in room size of 20 m³ Liquid, vapour pressure > 10 kPa at STP.

Covers use at ambient temperatures.

Fillers, putties, plasters, modelling clay Plasters and floor equalizers PC09B

Covers concentrations up to 2 %

Covers use up to 1 times per day

Covers use up to 12 days/yr

Covers skin contact area up to 857.5 cm2

For each use event, covers use amounts up to 13800 grams Covers use under typical household ventilation.

Covers exposure up to 2 hour(s)

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Covers use in room size of 20 m³ Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Fillers, putties, plasters, modelling clay Modelling clay PC09B Covers concentrations up to 1% Covers use up to 1 times per day Covers use up to 365 days/yr Covers skin contact area up to 254.4 cm2 For each use event, assumes swallowed amount of 1 grams Covers use at ambient temperatures. Liquid, vapour pressure > 10 kPa at STP. For each use event, covers use amounts up to 13800 grams Covers use under typical household ventilation. Covers use in room size of 20 m³ Covers exposure up to 6 hour(s) **Finger paints PC09C** Covers concentrations up to 50 % Covers use up to 1 times per day Covers use up to 365 days/yr Covers skin contact area up to 254.4 cm2 For each use event, assumes swallowed amount of 1.35 grams Covers use at ambient temperatures. Liquid, vapour pressure > 10 kPa at STP. For each use event, covers use amounts up to 13800 grams Covers use under typical household ventilation.

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Covers use in room size of 20 m³

Covers exposure up to 6 hour(s)

Non-metal-surface treatment products Waterborne latex wall paint PC15

Covers concentrations up to 1.5 %

Covers use up to 1 times per day

Covers use up to 4 days/yr

Covers skin contact area up to 428.75 cm2

For each use event, covers use amounts up to 2760 grams Covers use under typical household ventilation.

Covers use in room size of 20 m³ Covers exposure up to 2.2 hour(s) Covers use at ambient temperatures.

Liquid, vapour pressure > 10 kPa at STP.

Non-metal-surface treatment products Solvent rich, high solid, water borne paint PC15

Covers concentrations up to 27.5 %

Covers use up to 1 times per day

Covers use up to 6 days/yr

Covers skin contact area up to 428.75 cm2

For each use event, covers use amounts up to 744 grams Covers use under typical household ventilation.

Covers exposure up to 2.2 hour(s) Covers use in room size of 20 m³ Liquid, vapour pressure > 10 kPa at STP.

Covers use at ambient temperatures.

Non-metal-surface treatment products Aerosol spray can PC15

Covers concentrations up to 50 %

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Covers use up to 1 times per day

Covers use up to 2 days/yr

For each use event, covers use amounts up to 215 grams

Covers use in a one car garage (34 m3) under typical ventilation.

Covers exposure up to 0.33 hour(s) Covers use in room size of 34 m^3 Liquid, vapour pressure > 10 kPa at STP.

Covers use at ambient temperatures.

Covers skin contact area up to 857.5 cm2

Non-metal-surface treatment products Removers (paint-, glue-, wall paper-, sealant-remover) PC15 Covers concentrations up to 50 %

Covers use up to 1 times per day

Covers use up to 3 days/yr

Covers skin contact area up to 857.5 cm2

For each use event, covers use amounts up to 491 grams Covers use under typical household ventilation.

Covers exposure up to 2 hour(s)

Covers use in room size of 20 m³ Liquid, vapour pressure > 10 kPa at STP.

Covers use at ambient temperatures.

Ink and toners PC18

Covers concentrations up to 10 %

Covers use up to 1 times per day

Covers use up to 365 days/yr

Covers skin contact area up to 71.4 cm2

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For each use event, covers use amounts up to 40 grams Covers use under typical household ventilation. Covers exposure up to 2.2 hour(s) Covers use in room size of 20 m³ Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Leather tanning, dye, finishing, impregnation and care products Polishes, wax / cream (floor, furniture, shoes) **PC23** Covers concentrations up to 50 % Covers use up to 1 times per day Covers use up to 29 days/yr Covers skin contact area up to 430 cm2 For each use event, covers use amounts up to 56 grams Covers use under typical household ventilation. Covers exposure up to 1.23 hour(s) Covers use in room size of 20 m³ Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Leather tanning, dye, finishing, impregnation and care products Polishes, spray (furniture, shoes) PC23 Covers concentrations up to 50 % Covers use up to 1 times per day Covers use up to 8 days/yr Covers skin contact area up to 430 cm2 For each use event, covers use amounts up to 56 grams Covers use under typical household ventilation. Covers exposure up to 0.33 hour(s) Europe - BE Page 113 / 154

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Covers use in room size of 20 m³

Liquid, vapour pressure > 10 kPa at STP.

Covers use at ambient temperatures.

Lubricants, Greases and Release products Liquids PC24

Covers concentrations up to 100 %

Covers use up to 1 times per day

Covers use up to 4 days/yr

Covers skin contact area up to 468 cm2

For each use event, covers use amounts up to 2200 grams Covers use in a one car garage (34 m3) under typical ventilation.

Covers exposure up to 0.17 hour(s) Covers use in room size of 34 m^3 Liquid, vapour pressure > 10 kPa at STP.

Covers use at ambient temperatures.

Lubricants, Greases and Release products Pastes PC24

Covers concentrations up to 20 %

Covers use up to 1 times per day

Covers use up to 10 days/yr

Covers skin contact area up to 468 cm2

For each use event, covers use amounts up to 34 grams Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures.

Covers use in room size of 20 m³

Covers use under typical household ventilation.

Covers exposure up to 4 hour(s)

Lubricants, Greases and Release products Sprays PC24

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Covers concentrations up to 50 % Covers use up to 1 times per day Covers use up to 6 days/yr Covers skin contact area up to 428.75 cm2 For each use event, covers use amounts up to 73 grams Covers use under typical household ventilation. Covers exposure up to 0.17 hour(s) Covers use in room size of 20 m³ Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Polishes and wax blends Polishes, wax / cream (floor, furniture, shoes) PC31 Covers concentrations up to 50 % Covers use up to 1 times per day Covers use up to 29 days/yr Covers skin contact area up to 430 cm2 For each use event, covers use amounts up to 142 grams Covers use under typical household ventilation. Covers exposure up to 1.23 hour(s) Covers use in room size of 20 m³ Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Polishes and wax blends Polishes, spray (furniture, shoes) PC31 Covers concentrations up to 50 % Covers use up to 1 times per day Covers use up to 8 days/yr Europe - BE Page 115 / 154

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Covers skin contact area up to 430 cm2

For each use event, covers use amounts up to 35 grams

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overs exposure up to 0.33 hour(s) overs use in room size of 20 m ³ Liquid, apour pressure > 10 kPa at STP. extile dyes, finishing and impregnating products; including bleaches and other processing aids PC34 Covers overs use up to 10 % overs use up to 10 % overs use up to 1 times per day overs use up to 365 days/yr overs skin contact area up to 857.5 cm2 or each use event, covers use amounts up to 115 grams Covers se under typical household ventilation. overs exposure up to 1 hour(s) overs use in room size of 20 m ³ Liquid, apour pressure > 10 kPa at STP. overs use at ambient temperatures. ection 2.2 Control of environmental exposure roduct characteristics lot applicable nvironmental factors not influenced by risk management lot applicable there given operational conditions affecting environmental exposure to exposure assessment presented for the environment [G40] onditions and measures related to external treatment of waste for disposal lot applicable onditions and measures related to external recovery of waste	
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	Not applicable
ection 3 Exposure Estimation	Section 3 Exposure Estimation

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3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29] The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title	
Title:	
Use in Cleaning Agents - Consumer	
Use Descriptor	
Sector(s) of Use	SU21
Product Categories	PC03, PC04, PC08, PC09A, PC09B, PC09C, PC24, PC35, PC38
Environmental Release Categories	ERC8A, ERC8D
Specific Environmental Release Category	ESVOC 8.4c.v1
Dresses techs estivities severed	

Processes, tasks, activities covered

Covers general exposures to consumers arising from the use of household products sold as washing and cleaning products, aerosols, coatings, de-icers, lubricants and air care products.

Section 2 Operational conditions and risk management measures

Section 2.1 Control of consumer exposure

Product Characteristic

Liquid

Duration, frequency and amount

Not applicable

Other given operational conditions affecting consumer exposure

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Not applicable

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Contributing Scenarios/ Specific Risk Management Measures and Operating Conditions (only required controls to demonstrate safe use listed)

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For flammable substances a selection of the following measures need to be implemented to control unintended ignition of flammable substances. These measures are expected to be suitable to prevent minor accidents which might occur during consumer use. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, it is anticipated that there is no immediate concern as the risk should be controlled to an acceptable level. Use only with adequate ventilation. Avoid ignition sources – No Smoking. Review SDS for additional advice.

Air care products Air care, instant action (aerosol sprays) PC03

Covers concentrations up to 50 %

Covers use up to 4 times per day Covers use up to 365 days/yr

For each use event, covers use amounts up to 0.1 grams Covers

use under typical household ventilation.

Covers use in room size of 20 m³ Covers

exposure up to 0.25 hour(s) Covers use

at ambient temperatures.

Liquid, vapour pressure > 10 kPa at STP.

Covers skin contact area up to 857.5 cm2

Air care products Air care, continuous action (solid and liquid) PC03

Covers concentrations up to 10 %

Covers use up to 1 times per day

Covers use up to 365 days/yr

Covers skin contact area up to 35.7 cubic cm

For each use event, covers use amounts up to 0.48 grams

Covers use under typical household ventilation. Covers use

in room size of 20 m³

Covers exposure up to 8 hour(s) Covers use at ambient temperatures.

Liquid, vapour pressure > 10 kPa at STP.

Anti-freeze and de-icing products Washing car window PC04

Covers concentrations up to 1%

Covers use up to 1 times per day

Covers use up to 365 days/yr

For each use event, covers use amounts up to 0.5 grams

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Covers use in a one car garage (34 m3) under typical ventilation. Covers use in room size of 34 m^3 Covers exposure up to 0.02 hour(s) Covers use at ambient temperatures. Liquid, vapour pressure > 10 kPa at STP. Covers skin contact area up to 857.5 cm2 Anti-freeze and de-icing products Pouring into radiator PC04 Covers concentrations up to 10 % Covers use up to 1 times per day Covers use up to 365 days/yr Covers skin contact area up to 428 cm2 For each use event, covers use amounts up to 2000 grams Covers use in a one car garage (34 m3) under typical ventilation. Covers use in room size of 34 m³ Covers exposure up to 0.17 hour(s) Covers use at ambient temperatures. Liquid, vapour pressure > 10 kPa at STP. Anti-freeze and de-icing products Lock de-icer PC04 Covers concentrations up to 50 % Covers use up to 1 times per day Covers use up to 365 days/yr Covers skin contact area up to 214.4 cm2 For each use event, covers use amounts up to 4 grams Covers use in a one car garage (34 m3) under typical ventilation. Covers use in room size of 34 m³ Covers exposure up to 0.25 hour(s) Covers use at ambient temperatures.

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Liquid, vapour pressure > 10 kPa at STP.

Biocidal products (e.g. disinfectants, pest control) Laundry and dish washing products PC08 Covers concentrations up to 5 %

Covers use up to 1 times per day

Covers use up to 365 days/yr

Covers skin contact area up to 857.5 cm2

For each use event, covers use amounts up to 15 grams Covers use under typical household ventilation.

Covers use in room size of 20 m³ Covers exposure up to 0.5 hour(s) Covers use at ambient temperatures.

Liquid, vapour pressure > 10 kPa at STP.

Biocidal products (e.g. disinfectants, pest control) Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners) PC08

Covers concentrations up to 5 %

Covers use up to 1 times per day

Covers use up to 128 days/yr

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Covers skin contact area up to 857.5 cm2

For each use event, covers use amounts up to 27 grams Covers use under typical household ventilation.

Covers use in room size of 20 m^3 Covers exposure up to 0.33 hour(s)Covers use at ambient temperatures.

Liquid, vapour pressure > 10 kPa at STP.

Biocidal products (e.g. disinfectants, pest control) Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) PC08 Covers concentrations up to 15 %

Covers use up to 1 times per day

Covers use up to 128 days/yr

Covers skin contact area up to 428 cm2

For each use event, covers use amounts up to 35 grams Covers use under typical household ventilation.

Covers use in room size of 20 m³ Covers exposure up to 0.17 hour(s) Covers use at ambient temperatures.

Liquid, vapour pressure > 10 kPa at STP.

Coatings and paints, thinners, paint removers Waterborne latex wall paint PC09A

Covers concentrations up to 1.5 %

Covers use up to 1 times per day

Covers use up to 4 days/yr

Covers skin contact area up to 428.75 cm2

For each use event, covers use amounts up to 2760 grams Covers use under typical household ventilation.

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Covers use in room size of 20 m³ Covers exposure up to 2.2 hour(s) Covers use at ambient temperatures.

Liquid, vapour pressure > 10 kPa at STP.

Coatings and paints, thinners, paint removers Solvent rich, high solid, water borne paint PC09A Covers concentrations up to 27.5 %

Covers use up to 1 times per day

Covers use up to 6 days/yr

Covers skin contact area up to 428.75 cm2

For each use event, covers use amounts up to 744 grams Covers use under typical household ventilation.

Covers exposure up to 2.2 hour(s) Covers use in room size of 20 m³ Liquid, vapour pressure > 10 kPa at STP.

Covers use at ambient temperatures.

Coatings and paints, thinners, paint removers Aerosol spray can PC09A

Covers concentrations up to 50 %

Covers use up to 1 times per day

Covers use up to 2 days/yr

For each use event, covers use amounts up to 215 grams

Covers use in a one car garage (34 m3) under typical ventilation.

Covers exposure up to 0.33 hour(s) Covers use in room size of 34 m^3

Liquid, vapour pressure > 10 kPa at STP. Covers skin contact area up to 857.5 cm2 Covers use at ambient temperatures.

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Coatings and paints, thinners, paint removers Removers (paint-, glue-, wall paper-, sealant-remover) PC09A Covers concentrations up to 50 %

Covers use up to 1 times per day

Covers use up to 3 days/yr

Covers skin contact area up to 857.5 cm2

For each use event, covers use amounts up to 491 grams Covers use under typical household ventilation.

Covers exposure up to 2 hour(s)

Covers use in room size of 20 m³ Liquid, vapour pressure > 10 kPa at STP.

Covers use at ambient temperatures.

Fillers, putties, plasters, modelling clay fillers and Putty PC09B

Covers concentrations up to 2 %

Covers use up to 1 times per day

Covers use up to 12 days/yr

Covers skin contact area up to 35.73 cm2

For each use event, covers use amounts up to 85 grams Covers use under typical household ventilation.

Covers use in room size of 20 m³ Covers exposure up to 4 hour(s) Covers use at ambient temperatures.

Liquid, vapour pressure > 10 kPa at STP.

Fillers, putties, plasters, modelling clay Plasters and floor equalizers PC09B

Covers concentrations up to 2 %

Covers use up to 1 times per day

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Covers use up to 12 days/yr Covers skin contact area up to 857.5 cm2 For each use event, covers use amounts up to 13800 grams Covers use under typical household ventilation. Covers use in room size of 20 m³ Covers exposure up to 2 hour(s) Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Fillers, putties, plasters, modelling clay Modelling clay PC09B Covers concentrations up to 1% Covers use up to 1 times per day Covers use up to 365 days/yr Covers skin contact area up to 254.4 cm2 For each use event, assumes swallowed amount of 1 grams Covers use at ambient temperatures. Covers use under typical household ventilation. Liquid, vapour pressure > 10 kPa at STP. Covers exposure up to 2.2 hour(s) Covers use in room size of 20 m³ For each use event, covers use amounts up to 13800 gram(s) **Finger paints PC09C** Covers concentrations up to 50 % Covers use up to 1 times per day Covers use up to 365 days/yr Europe - BE Page 126 / 154

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Covers skin contact area up to 254.4 cm2

For each use event, assumes swallowed amount of 1.35 grams Covers use at ambient temperatures.

Covers use under typical household ventilation.

Liquid, vapour pressure > 10 kPa at STP.

Covers exposure up to 2.2 hour(s)

Covers use in room size of 20 m³

For each use event, covers use amounts up to 13800 gram(s)

Lubricants, Greases and Release products Liquids PC24

Covers concentrations up to 100 %

Covers use up to 1 times per day

Covers use up to 4 days/yr

Covers skin contact area up to 468 cm2

For each use event, covers use amounts up to 2200 grams Covers use in a one car garage (34 m3) under typical ventilation.

Covers exposure up to 0.17 hour(s) Covers use in room size of 34 m^3 Liquid, vapour pressure > 10 kPa at STP.

Covers use at ambient temperatures.

Lubricants, Greases and Release products Pastes PC24

Covers concentrations up to 20 %

Covers use up to 1 times per day

Covers use up to 10 days/yr

Covers skin contact area up to 468 cm2

Covers use in room size of 20 m³

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For each use event, covers use amounts up to 34 grams Liquid, vapour pressure > 10 kPa at STP. Covers use under typical household ventilation. Covers exposure up to 4 hour(s) Covers use at ambient temperatures. Lubricants, Greases and Release products Sprays PC24 Covers concentrations up to 50 % Covers use up to 1 times per day Covers use up to 6 days/yr Covers skin contact area up to 428.75 cm2 For each use event, covers use amounts up to 73 grams Covers use under typical household ventilation. Covers exposure up to 0.17 hour(s) Covers use in room size of 20 m³ Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Washing and cleaning products (including solvent based products) Laundry and dish washing products PC35 Covers concentrations up to 5% Covers use up to 1 times per day Covers use up to 365 days/yr Covers skin contact area up to 857.5 cm2 For each use event, covers use amounts up to 15 grams Covers use under typical household ventilation. Covers use in room size of 20 m³ Covers exposure up to 0.5 hour(s) Liquid, vapour pressure > 10 kPa at STP.

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Covers use at ambient temperatures.

Washing and cleaning products (including solvent based products) Cleaners, liquids (all purpose cleaners,

sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners) PC35 Covers concentrations up to 5%

Covers use up to 1 times per day

Covers use up to 128 days/yr

Covers skin contact area up to 857.5 cm2

For each use event, covers use amounts up to 27 grams Covers use under typical household ventilation.

Covers exposure up to 0.33 hour(s) Covers use in room size of 20 m^3 Liquid, vapour pressure > 10 kPa at STP.

Covers use at ambient temperatures.

Washing and cleaning products (including solvent based products) Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) PC35

Covers concentrations up to 15 %

Covers use up to 1 times per day

Covers use up to 128 days/yr

Covers skin contact area up to 428 cm2

For each use event, covers use amounts up to 35 grams Covers use under typical household ventilation.

Covers exposure up to 0.17 hour(s) Covers use in room size of 20 m^3 Liquid, vapour pressure > 10 kPa at STP.

Covers use at ambient temperatures.

Welding and soldering products (with flux coatings or flux cores), flux products PC38

Covers concentrations up to 20 %

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Covers use up to 1 times per day Covers use up to 365 days/yr For each use event, covers use amounts up to 12 grams Covers use under typical household ventilation. Covers use in room size of 20 m³ Covers exposure up to 1 hour(s) Covers use at ambient temperatures. Liquid, vapour pressure > 10 kPa at STP. Covers skin contact area up to 857.5 cm2 Air care products Air care, instant action (aerosol sprays) PC03 Covers concentrations up to 50 % Covers use up to 4 times per day Covers use up to 365 days/yr For each use event, covers use amounts up to 0.5 grams Covers use under typical household ventilation. Covers use in room size of 20 m³ Covers exposure up to 0.25 hour(s) Covers skin contact area up to 857.5 cm2 Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Air care products Air care, continuous action (solid and liquid) PC03 Covers concentrations up to 50 % Covers use up to 1 times per day Covers use up to 365 days/yr Covers skin contact area up to 35.7 cm2

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For each use event, covers use amounts up to 0.48 grams Covers use under typical household ventilation.

Covers use in room size of 20 m³

Covers exposure up to 8 hour(s)

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Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures.

Section 2.2 Control of environmental exposure

Product characteristics

Not applicable

Duration, frequency and amount

Not applicable

Environmental factors not influenced by risk management

Not applicable

Other given operational conditions affecting environmental exposure

No exposure assessment presented for the environment [G40]

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. [G22]

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title		
Title:		
Lubricants - Consumer (Low Release)		
Use Descriptor		
Sector(s) of Use	SU21	
Product Categories	PC01, PC24, PC31	
Environmental Release Categories	ERC9A, ERC9B	
Specific Environmental Release Category		
Processes, tasks, activities covered		
Covers the consumer use of formulated lubricants in closed and open systems including transfer operations, application, operation of engines and similar articles, equipment maintenance and disposal of waste oil.		
Section 2 Operational conditions and risk management r	neasures	
Section 2.1 Control of consumer exposure		
Product Characteristic		
Liquid		
Duration, frequency and amount		
Not applicable		
Other given operational conditions affecting consumer exposure		
Not applicable		
Contributing Scenarios/ Specific Risk Management Measures and Operating Conditions (only required controls to demonstrate safe use listed)		

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For flammable substances a selection of the following measures need to be implemented to control unintended ignition of flammable substances. These measures are expected to be suitable to prevent minor accidents which might occur during consumer use. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, it is anticipated that there is no immediate concern as the risk should be controlled to an acceptable level. Use only with adequate ventilation. Avoid ignition sources – No Smoking. Review SDS for additional advice. Adhesives, sealants Glues, hobby use PC01 Covers concentrations up to 30 % Covers use up to 1 times per day Covers use up to 365 days/yr Covers skin contact area up to 35.73 cm2 For each use event, covers use amounts up to 9 grams Covers use under typical household ventilation. Covers use in room size of 20 m³ Covers exposure up to 4 hour(s) Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Adhesives, sealants Glues, DIY-use (carpet glue, tile glue, wood parquet glue) PC01 Covers concentrations up to 30 % Covers use up to 1 times per day Covers use up to 1 days/yr

Covers skin contact area up to 110 cm2

For each use event, covers use amounts up to 6390 grams Covers

use under typical household ventilation.

Covers exposure up to 6 hour(s)

Covers use in room size of 20 m³

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Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Adhesives, sealants Glue from spray PC01 Covers concentrations up to 30 % Covers use up to 1 times per day Covers use up to 6 days/yr Covers skin contact area up to 35.73 cm2 For each use event, covers use amounts up to 85.05 grams Covers use under typical household ventilation. Covers exposure up to 4 hour(s) Covers use in room size of 20 m³ Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Adhesives, sealants Sealants PC01 Covers concentrations up to 30 % Covers use up to 1 times per day Covers use up to 365 days/yr Covers skin contact area up to 35.73 cm2 For each use event, covers use amounts up to 75 grams Covers use under typical household ventilation. Covers exposure up to 1 hour(s) Covers use in room size of 20 m³ Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Lubricants, Greases and Release products Liquids PC24 Covers concentrations up to 100 % Covers use up to 1 times per day Covers use up to 4 days/yr Covers skin contact area up to 468 cm2 For each use event, covers use amounts up to 2200 grams Covers use in a one car garage (34 m3) under typical ventilation. Covers exposure up to 0.17 hour(s) Covers use in room size of 34 m³ Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Lubricants, Greases and Release products Pastes PC24 Covers concentrations up to 20 %

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Covers use up to 1 times per day Covers use up to 10 days/yr Covers skin contact area up to 468 cm2 For each use event, covers use amounts up to 34 grams Liquid, vapour pressure > 10 kPa at STP. Covers exposure up to 4 hour(s) Covers use at ambient temperatures. Covers use under typical household ventilation. Covers use in room size of 20 m³ Lubricants, Greases and Release products Sprays PC24 Covers concentrations up to 50 % Covers use up to 1 times per day Covers use up to 6 days/yr Covers skin contact area up to 428.75 cm2 For each use event, covers use amounts up to 73 grams

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Covers use under typical household ventilation.
Covers exposure up to 0.17 hour(s)
Covers use in room size of 20 m ³ Liquid,
vapour pressure > 10 kPa at STP.
Covers use at ambient temperatures.
Polishes and wax blends Polishes, wax / cream (floor, furniture, shoes) PC31
Covers concentrations up to 50 %
Covers use up to 1 times per day
Covers use up to 29 days/yr
Covers skin contact area up to 430 cm2
For each use event, covers use amounts up to 142 grams Covers
use under typical household ventilation.
Covers exposure up to 1.23 hour(s)
Covers use in room size of 20 m ³ Liquid,
vapour pressure > 10 kPa at STP.
Covers use at ambient temperatures.
Polishes and wax blends Polishes, spray (furniture, shoes) PC31
Covers concentrations up to 50 %
Covers use up to 1 times per day
Covers use up to 8 days/yr
Covers skin contact area up to 430 cm2
For each use event, covers use amounts up to 35 grams Covers
use under typical household ventilation.
Covers exposure up to 0.33 hour(s)
Covers use in room size of 20 m ³ Liquid,
vapour pressure > 10 kPa at STP.
Covers use at ambient temperatures.
Section 2.2 Control of environmental exposure
Product characteristics
Not applicable
Duration, frequency and amount
Not applicable
Environmental factors not influenced by risk management
Not applicable

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Other given operational conditions affecting environmental exposure

No exposure assessment presented for the environment [G40]

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title	
Title:	
Agrochemical uses - Consumer	
Use Descriptor	
Sector(s) of Use	SU21

Europe - BE

Product Categories	PC12, PC27
Environmental Release Categories	ERC8A, ERC8D
Specific Environmental Release Category	
Processes, tasks, activities covered	
Covers the consumer use of agrochemicals in liquid	and solid forms.
Section 2 Operational conditions and risk manager	nent measures
Section 2.1 Control of consumer exposure	
Product Characteristic	
Liquid	
Duration, frequency and amount	
Not applicable	
Other given operational conditions affecting consumer exposure	
Not applicable	
Contributing Scenarios/ Specific Risk Management Measures and Operating	Conditions
(only required controls to demonstrate safe use listed)	

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For flammable substances a selection of the following measures need to be implemented to control unintended ignition of flammable substances. These measures are expected to be suitable to prevent minor accidents which might occur during consumer use. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, it is anticipated that there is no immediate concern as the risk should be controlled to an acceptable level. Use only with adequate ventilation. Avoid ignition sources – No Smoking. Review SDS for additional advice.

Fertilizers Lawn and garden preparations PC12 Covers concentrations up to 50 % Covers use up to 1 times per day Covers use up to 365 days/yr Covers skin contact area up to 857.5 cm2 For each use event, assumes swallowed amount of 0.3 grams Covers exposure up to 4 hour(s) Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Covers use in room size of 20 m³ Covers use under typical household ventilation. For each use event, covers use amounts up to 50 grams Plant protection products PC27 Covers concentrations up to 50 % Covers use up to 1 times per day Covers use up to 365 days/yr Covers skin contact area up to 857.5 cm2 For each use event, assumes swallowed amount of 0.3 grams Liquid, vapour pressure > 10 kPa at STP. For each use event, covers use amounts up to 50 gram(s) Covers

exposure up to 4 hour(s)

Covers use under typical household ventilation. Covers use at ambient temperatures. Covers use in room size of 20 m³ Avoid using at a product concentration greater than 2.5 % Section 2.2 Control of environmental exposure

Product characteristics

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Not applicable

Duration, frequency and amount

Not applicable

Environmental factors not influenced by risk management

Not applicable

Other given operational conditions affecting environmental exposure

No exposure assessment presented for the environment [G40]

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29] The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title

Title:

Use as a fuel - Consumer

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Use Descriptor		
Sector(s) of Use	SU21	
Product Categories	PC13	
Environmental Release Categories	ERC9A, ERC9B	
Specific Environmental Release Category	ESVOC 9.12c.v1	
Processes, tasks, activities covered	Processes, tasks, activities covered	
Covers consumer uses in liquid fuels.	Covers consumer uses in liquid fuels.	
Section 2 Operational conditions and risk manager	nent measures	
Section 2.1 Control of consumer exposure		
Product Characteristic		
Liquid		
Duration, frequency and amount		
Not applicable		
Other given operational conditions affecting consumer exposure		
Not applicable		
Contributing Scenarios/		
Specific Risk Management Measures and Operating Conditions		
(only required controls to demonstrate safe use listed)		

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For flammable substances a selection of the following measures need to be implemented to control unintended ignition of flammable substances. These measures are expected to be suitable to prevent minor accidents which might occur during consumer use. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, it is anticipated that there is no immediate concern as the risk should be controlled to an acceptable level. Use only with adequate ventilation. Avoid ignition sources – No Smoking. Review SDS for additional advice.

Liquid: Automotive Refuelling PC13 Covers concentrations up to 100 % Covers use up to 1 times per day Covers use up to 52 days/yr Covers skin contact area up to 210 cm2 For each use event, covers use amounts up to 37500 grams Covers outdoor use. Covers use in room size of 100 m³ Covers exposure up to 0.05 hour(s) Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Liquid Scooter Refuelling PC13 Covers concentrations up to 100 % Covers use up to 1 times per day Covers use up to 52 days/yr Covers skin contact area up to 210 cm2 For each use event, covers use amounts up to 3750 grams Covers outdoor use. Covers use in room size of 100 m³ Covers exposure up to 0.03 hour(s) Liquid, vapour pressure > 10 kPa at STP.

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Covers use at ambient temperatures. Liquid, Garden Equipment - Use PC13 Covers concentrations up to 100 % Covers use up to 1 times per day Covers use up to 26 days/yr For each use event, covers use amounts up to 750 grams Covers outdoor use. Covers exposure up to 2 hour(s) Covers use in room size of 100 m³ Covers skin contact area up to 420 cm2 Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Liquid: Garden Equipment - Refueling PC13 Covers concentrations up to 100 % Covers use up to 1 times per day Covers use up to 26 days/yr Covers skin contact area up to 420 cm2 For each use event, covers use amounts up to 750 grams Covers use in a one car garage (34 m3) under typical ventilation. Covers exposure up to 0.03 hour(s) Covers use in room size of 34 m³ Liquid, vapour pressure > 10 kPa at STP. Covers use at ambient temperatures. Liquid: Home space heater fuel PC13 Covers concentrations up to 100 % Covers use up to 1 times per day Covers use up to 365 days/yr Covers skin contact area up to 210 cm2 For each use event, covers use amounts up to 3000 grams Covers use under typical household ventilation. Covers use in room size of 20 m³ Covers exposure up to 0.03 hour(s) Covers use at ambient temperatures. Liquid, vapour pressure > 10 kPa at STP. Section 2.2 Control of environmental exposure Product characteristics

Europe - BE

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Not applicable

Duration, frequency and amount

Not applicable

Environmental factors not influenced by risk management

Not applicable

Other given operational conditions affecting environmental exposure

No exposure assessment presented for the environment [G40]

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title

Title:

Functional Fluids - Consumer

Europe - BE

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Use Descriptor		
Sector(s) of Use	SU21	
Product Categories	PC16, PC17	
Environmental Release Categories	ERC9A, ERC9B	
Specific Environmental Release Category		
Processes, tasks, activities covered		
Use of sealed items containing functional fluids e.g. transfe	er oils, hydraulic fluids, refrigerants.	
Section 2 Operational conditions and risk management n	neasures	
Section 2.1 Control of consumer exposure		
Product Characteristic		
Liquid		
Duration, frequency and amount		
Not applicable		
Other given operational conditions affecting consumer exposure		
Not applicable		
Contributing Scenarios/ Specific Risk Management Measures and Operating Conditions (only required controls to demonstrate safe use listed)		

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For flammable substances a selection of the following measures need to be implemented to control unintended ignition of flammable substances. These measures are expected to be suitable to prevent minor accidents which might occur during consumer use. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, it is anticipated that there is no immediate concern as the risk should be controlled to an acceptable level. Use only with adequate ventilation. Avoid ignition sources – No Smoking. Review SDS for additional advice.

Heat transfer fluids Liquids PC16 Covers concentrations up to 100 % Covers use up to 1 times per day Covers use up to 4 days/yr Covers skin contact area up to 468 cm2 For each use event, covers use amounts up to 2200 grams Covers use in a one car garage (34 m3) under typical ventilation. Covers use in room size of 34 m³ Covers exposure up to 0.17 hour(s) Covers use at ambient temperatures. Liquid, vapour pressure > 10 kPa at STP. Hydraulic fluids Liquids PC17 Covers concentrations up to 100 % Covers use up to 1 times per day Covers use up to 4 days/yr Covers skin contact area up to 468 cm2 For each use event, covers use amounts up to 2200 grams Covers use in a one car garage (34 m3) under typical ventilation. Covers use in room size of 34 m³ Covers exposure up to 0.17 hour(s) Liquid, vapour pressure > 10 kPa at STP.

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Covers use at ambient temperatures.

Section 2.2 Control of environmental exposure

Product characteristics

Not applicable

Duration, frequency and amount

Not applicable

Environmental factors not influenced by risk management

Not applicable

Other given operational conditions affecting environmental exposure

No exposure assessment presented for the environment [G40]

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.[G29]

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title

Title:

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De-icing and anti-icing applications - Consumer		
Use Descriptor		
Sector(s) of Use	SU21	
Product Categories	PC04	
Environmental Release Categories	ERC8D	
Specific Environmental Release Category	ESVOC 8.14b.v1	
Processes, tasks, activities covered		
De-icing of vehicles and similar equipment by spraying.		
Section 2 Operational conditions and risk management	measures	
Section 2.1 Control of consumer exposure		
Product Characteristic		
Liquid		
Duration, frequency and amount		
Not applicable		
Other given operational conditions affecting consumer exposure		
Not applicable		
Contributing Scenarios/ Specific Risk Management Measures and Operating Conditions (only required controls to demonstrate safe use listed)		

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For flammable substances a selection of the following measures need to be implemented to control unintended ignition of flammable substances. These measures are expected to be suitable to prevent minor accidents which might occur during consumer use. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, it is anticipated that there is no immediate concern as the risk should be controlled to an acceptable level. Use only with adequate ventilation. Avoid ignition sources – No Smoking. Review SDS for additional advice.

Anti-freeze and de-icing products Washing car window PC04

Covers concentrations up to 1%

Covers use up to 1 times per day

Covers use up to 365 days/yr

For each use event, covers use amounts up to 0.5 grams

Covers use in a one car garage (34 m3) under typical ventilation.

Covers use in room size of 34 m³

Covers exposure up to 0.02 hour(s)

Covers skin contact area up to 428 cm2 Covers

use at ambient temperatures.

Liquid, vapour pressure > 10 kPa at STP.

Anti-freeze and de-icing products Pouring into radiator PC04

Covers concentrations up to 10 %

Covers use up to 1 times per day

Covers use up to 365 days/yr

Covers skin contact area up to 428 cm2

For each use event, covers use amounts up to 2000 grams Covers

use in a one car garage (34 m3) under typical ventilation.

Covers use in room size of 34 m³

Covers exposure up to 0.17 hour(s)

Liquid, vapour pressure > 10 kPa at STP.

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Covers use at ambient temperatures.	
Anti-freeze and de-icing products Lock de-icer PC04	
Covers concentrations up to 50 %	
Covers use up to 1 times per day	
Covers use up to 365 days/yr	
Covers skin contact area up to 214.4 cm2	
For each use event, covers use amounts up to 4 grams	
Covers use in a one car garage (34 m3) under typical ventilation. Covers use in room size of 34 m ³	
Covers exposure up to 0.25 hour(s)	
Liquid, vapour pressure > 10 kPa at STP.	
Covers use at ambient temperatures.	
Section 2.2 Control of environmental exposure	
Product characteristics	
Not applicable	
Duration, frequency and amount	
Not applicable	
Environmental factors not influenced by risk management	
Not applicable	
Other given operational conditions affecting environmental exposure	
No exposure assessment presented for the environment [G40]	
Conditions and measures related to municipal sewage treatment plant	
Not applicable	
Conditions and measures related to external treatment of waste for disposal	
Not applicable	
Conditions and measures related to external recovery of waste	
Not applicable	
Section 3 Exposure Estimation	
3.1. Health	
Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when	
the operational conditions/risk management measures given in section 2 are implemented.[G29]	
The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]	
3.2. Environment	

Not applicable

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Section 4 Guidance to check compliance with the Exposure Scenario

4.1. Health

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable

Section 1 Exposure Scenario Title

Title:

Other Consumer Uses

Use Descriptor

Use Descriptor	
Sector(s) of Use	SU21
Product Categories	PC28, PC39
Environmental Release Categories	ERC8A, ERC8D
Specific Environmental Release Category	ESVOC 8.16.v1

Processes, tasks, activities covered

Consumer uses e.g. as a carrier in cosmetics/personal care products, perfumes and fragrances. Note: For cosmetic and personal care products, risk assessment only required for the environment under REACH as human health is covered by alternative legislation.

Section 2 Operational conditions and risk management measures

Section 2.1 Control of consumer exposure

Product Characteristic

Liquid

Duration, frequency and amount

Not applicable

Other given operational conditions affecting consumer exposure

Not applicable

Contributing Scenarios/

Specific Risk Management Measures and Operating Conditions

(only required controls to demonstrate safe use listed)

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General measures (Flammable Liquid)

Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For flammable substances a selection of the following measures need to be implemented to control unintended ignition of flammable substances. These measures are expected to be suitable to prevent minor accidents which might occur during consumer use. Based on the implementation of a selection of handling and storage risk management measures for the identified uses, it is anticipated that there is no immediate concern as the risk should be controlled to an acceptable level. Use only with adequate ventilation. Avoid ignition sources – No Smoking. Review SDS for additional advice.

PC28

PC39

Liquid, vapour pressure > 10 kPa at STP. Liquid, vapour pressure > 10 kPa at STP.

Section 2.2 Control of environmental exposure

Product characteristics

Not applicable

Duration, frequency and amount

Not applicable

Environmental factors not influenced by risk management

Not applicable

Other given operational conditions affecting environmental exposure

No exposure assessment presented for the environment [G40]

Conditions and measures related to municipal sewage treatment plant

Not applicable

Conditions and measures related to external treatment of waste for disposal

Not applicable

Conditions and measures related to external recovery of waste

Not applicable

Section 3 Exposure Estimation

3.1. Health

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated [G21]

3.2. Environment

Not applicable

Section 4 Guidance to check compliance with the Exposure Scenario

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4.1. Health

Predicted exposures are not expected to exceed the applicable consumer reference values when the operational conditions/risk management measures given in section 2 are implemented. [G22EM]

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.[G23]

4.2. Environment

Not applicable