

AQUA BLOCKER LIQUID
Supersedes Date: 28-Apr-2020

Revision Date: 17-Sep-2020
Revision Number 1.04

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product Identifier

Product Name AQUA BLOCKER LIQUID
Pure substance/mixture Mixture

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

Recommended use Coatings.
Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Company Name

Bostik GmbH
An der Bundesstrasse 16
33829 Borgholzhausen, Germany
Tel: +49 (0) 5425 / 801 0
Fax: +49 (0) 5425 / 801 140

E-mail address SDS.box-EU@bostik.com

1.4. Emergency telephone number

Emergency Telephone No information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Not classified

2.2. Label Elements

Not classified

Signal word

None

Hazard statements

Not classified

EU Specific Hazard Statements

EUH208 - Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine. May produce an allergic reaction.
EUH210 - Safety data sheet available on request.

2.3. Other Hazards

Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing

PBT & vPvB

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This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT) This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	REACH Registration Number
Trimethoxyvinylsilane	220-449-8	2768-02-7	1 - <2.5	Acute Tox. 4 (H332) Flam. Liq. 3 (H226)		01-2119513215-52-XXXX
Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	258-207-9	52829-07-9	0.1- <1	Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)		01-2119537297-32-XXXX
Titanium dioxide	236-675-5	13463-67-7	0.1- <1	Carc. 2 (H351i)		01-2119489379-17-XXXX
N-(3-(trimethoxysilyl)propyl)ethylenediamine	217-164-6	1760-24-3	0.1- <1	Eye Dam. 1 (H318) Skin Sens. 1B (H317) STOT SE 3 (H335)		01-2119970215-39-XXXX

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

Note: ^ indicates not classified, 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 $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

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	Move victim to fresh air. If symptoms persist, call a doctor.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Consult an ophthalmologist.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.
Ingestion	Call a doctor immediately. Do NOT induce vomiting. Rinse mouth thoroughly with water.

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Never give anything by mouth to an unconscious person. Small amounts of toxic methanol are released by hydrolysis.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms None known.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically. Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Water spray, carbon dioxide (CO₂), dry chemical, alcohol-resistant foam.

Unsuitable extinguishing media Full water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Do not allow run-off from fire-fighting to enter drains or water courses. Thermal decomposition can lead to release of irritating and toxic gases and vapours.

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO₂).

5.3. Advice for firefighters

Special protective equipment for fire-fighters Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required. Do not get in eyes, on skin, or on clothing.

Other information Ventilate the area. Prevent further leakage or spillage if safe to do so.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Prevent product from entering drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Methods for containment Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Advice on safe handling Ensure adequate ventilation. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

General hygiene considerations Keep away from food, drink and animal feedingstuffs. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Take off all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Protect from moisture. Keep/store only in original container. Keep at temperatures between 5 and 35 °C.

7.3. Specific end use(s)

Specific Use(s)
Coatings. Sealant.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

Other information Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing

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

Chemical name	European Union
Methyl alcohol 67-56-1	TWA: 200 ppm TWA: 260 mg/m ³ *

Derived No Effect Level (DNEL) No information available

Derived No Effect Level (DNEL)			
Trimethoxyvinylsilane (2768-02-7)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Systemic health effects Long term	Inhalation	27,6 mg/m ³	
worker Systemic health effects Long term	Dermal	3,9 mg/kg bw/d	

Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate (52829-07-9)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Short term Long term Systemic health effects	Inhalation	2.82 mg/m ³	
worker Long term Systemic health effects	Dermal	1.6 mg/kg	

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Titanium dioxide (13463-67-7)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Long term Local health effects	Inhalation	10 mg/m ³	

Derived No Effect Level (DNEL)			
Trimethoxyvinylsilane (2768-02-7)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Consumer Systemic health effects Long term	Inhalation	18,9 mg/m ³	
Consumer Systemic health effects Long term	Dermal	7,8 mg/kg bw/d	
Consumer Systemic health effects Long term	Oral	0,3 mg/kg bw/d	

Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate (52829-07-9)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Consumer Long term Systemic health effects	Dermal	0.8 mg/kg	
Consumer Long term Systemic health effects	Oral	0.4 mg/kg	

Titanium dioxide (13463-67-7)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Consumer Long term Systemic health effects	Oral	700 mg/kg bw/d	

Predicted No Effect Concentration (PNEC) No information available.

Predicted No Effect Concentration (PNEC)	
Trimethoxyvinylsilane (2768-02-7)	
Environmental compartment	Predicted No Effect Concentration (PNEC)
Freshwater	0.34 mg/l
Marine water	0.034 mg/l
Microorganisms in sewage treatment	110 mg/l

Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate (52829-07-9)	
Environmental compartment	Predicted No Effect Concentration (PNEC)
Freshwater	0.018 mg/l
Marine water	0.0018 mg/l
Freshwater sediment	29 mg/kg
Marine sediment	2.9 mg/kg
Soil	5.9 mg/kg

Titanium dioxide (13463-67-7)	
Environmental compartment	Predicted No Effect Concentration (PNEC)
Marine water	0.0184 mg/l
Freshwater sediment	1000 mg/kg

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Freshwater	0.184 mg/l
Marine sediment	100 mg/kg
Soil	100 mg/kg
Microorganisms in sewage treatment	100 mg/l
Freshwater - intermittent	0.193 mg/l

8.2. Exposure controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face protection	Wear safety glasses with side shields (or goggles). Eye protection must conform to standard EN 166
Hand protection	Wear suitable gloves: Nitrile rubber. Butyl rubber. Neoprene™. Glove thickness > 0.4 mm. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. The breakthrough time for the mentioned glove material is in general greater than 480 min. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Gloves must conform to standard EN 374
Skin and body protection	Wear suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Wear a respirator conforming to EN 140 with Type A/P2 filter or better.
Recommended filter type:	Brown. White.

Environmental exposure controls Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Paste
Colour	Grey
Odour	Characteristic
Odour threshold	No information available

Property	Values	Remarks • Method
pH	No data available	
Melting point / freezing point	No data available	
Boiling point / boiling range	No data available	
Flash point	> 61 °C	CC (closed cup)
Evaporation rate	No data available	
Flammability (solid, gas)	No data available	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapour pressure	No data available	
Vapour density	No data available	
Relative density	1.5	
Water solubility	Reacts with water	
Solubility(ies)	No data available	
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature		
Kinematic viscosity	No data available	
Dynamic viscosity	No data available	
Explosive properties	No data available	
Oxidising properties	No data available	

9.2. Other information

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Solid content (%)	No information available
VOC Content (%)	No information available
Density	No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Product cures with moisture.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Protect from moisture.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None under normal use conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation Based on available data, the classification criteria are not met.

Eye contact Based on available data, the classification criteria are not met.

Skin contact Based on available data, the classification criteria are not met.

Ingestion Based on available data, the classification criteria are not met.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms None known.

Numerical measures of toxicity

No information available

Acute toxicity

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The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (dermal) 11,770.60 mg/kg
ATEmix (inhalation-vapour) 1,237.57 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Trimethoxyvinylsilane 2768-02-7	LD50 = 7120 -7236 mg/kg (Rattus) OECD 401	= 3360 µL/kg (Oryctolagus cuniculus)	LC50 (4hr) 16.8 mg/l (Rattus) OECD TG 403
Bis(2,2,6,6-tetramethyl-4-piperi dyl) sebacate 52829-07-9	LD50 (Rattus) > 2000 mg/kg OECD 423	LD50 (Rattus) > 3 170 mg/kg OECD 402	=500 mg/m ³ (Rattus) 4 h
Titanium dioxide 13463-67-7	>10000 mg/kg (Rattus)	LD50 > 10000 mg/Kg	>5 mg/l
N-(3-(trimethoxysilyl)propyl)eth ylenediamine 1760-24-3	LD50 = 2295 mg/kg (Rattus) EPA OPPTS 870.1100	LD50 > 2000 mg/kg (Oryctolagus cuniculus) EPA OPPTS 870.1200	

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

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Chemical name	European Union
Titanium dioxide 13463-67-7	Carc. 2

Component Information

Titanium dioxide (13463-67-7)

Method	Species	Results
Oral	Rat	Not Carcinogenic
Inhalation Xu et al (2010), carcinogenic activity of nanoscale TiO ₂ administered by an intrapulmonary spraying (IPS) - initiation-promotion protocol in rat lung	Rat	Carcinogenic

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure Based on available data, the classification criteria are not met.

STOT - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

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12.1. Toxicity

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea	M-Factor	M-Factor (long-term)
Trimethoxyvinylsilane 2768-02-7	EC 50 (72h) > 957 mg/l (Desmodesmus subspicatus) EU Method C.3	LC50 (96h) = 191 mg/l (Oncorhynchus mykiss)	-	EC50(48hr) 168.7mg/l (Daphnia magna)		
Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9	EC50 72Hr 0.705 mg/l (Pseudokirchnerella subcapitata)	LC50 (96h) = 5.29 mg/l (Oryzias latipes)	-	LC50 48Hr 8.58 mg/l (Daphnia magna)		
Titanium dioxide 13463-67-7	LC50 (96h) >10000 mg/l (Cyprinodon variegatus) OECD 203	-	-	-		
N-(3-(trimethoxysilyl)propyl)ethylenediamine 1760-24-3	-	LC50 (96H) =597 mg/L (Danio rerio)Semi-static	-	EC50 (48h) =81mg/L Daphnia magna Static		

12.2. Persistence and degradability

Persistence and degradability No information available.

Component Information

Trimethoxyvinylsilane (2768-02-7)

Method	Exposure time	Value	Results
OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F)	28 days	BOD	51 % Not readily biodegradable

Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate (52829-07-9)

Method	Exposure time	Value	Results
OECD Test No. 303: Simulation Test - Aerobic Sewage Treatment -- A: Activated Sludge Units; B: Biofilms	28 days	Total organic carbon (TOC)	24 % Moderate

12.3. Bioaccumulative potential

Bioaccumulation No information available.

Chemical name	Partition coefficient	Bioconcentration factor (BCF)
Trimethoxyvinylsilane 2768-02-7	1.1	-
Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9	0.35	-
N-(3-(trimethoxysilyl)propyl)ethylenediamine 1760-24-3	-0.3	-

12.4. Mobility in soil

Mobility in soil No information available.

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12.5. Results of PBT and vPvB assessment

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

Chemical name	PBT and vPvB assessment
Trimethoxyvinylsilane 2768-02-7	The substance is not PBT / vPvB
Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9	The substance is not PBT / vPvB
Titanium dioxide 13463-67-7	The substance is not PBT / vPvB PBT assessment does not apply
N-(3-(trimethoxysilyl)propyl)ethylenediamine 1760-24-3	The substance is not PBT / vPvB

12.6. Other adverse effects

Other adverse effects No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Uncured product should be disposed of as hazardous waste. Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

Contaminated packaging Handle contaminated packages in the same way as the product itself.

European Waste Catalogue 08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09

Other information Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1 UN number Not regulated
14.2 Proper Shipping Name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Environmental hazards Not applicable
14.6 Special Provisions None

IMDG

14.1 UN number Not regulated
14.2 Proper Shipping Name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Marine pollutant Np
14.6 Special Provisions None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

Air transport (ICAO-TI / IATA-DGR)

14.1 UN number Not regulated
14.2 Proper Shipping Name Not regulated
14.3 Transport hazard class(es) Not regulated

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14.4 Packing group Not regulated
14.5 Environmental hazards Not applicable
14.6 Special Provisions None

Section 15: REGULATORY INFORMATION

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

European Union

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

SVHC: Substances of Very High Concern for Authorisation:

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

EU-REACH (1907/2006) - Annex XVII - Substances subject to Restriction

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Chemical name	CAS No	Restricted substance per REACH Annex XVII
Diocetyl tin oxide	870-08-6	20

Substance subject to authorisation per REACH Annex XIV

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

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Persistent Organic Pollutants

Not applicable

National regulations

France

Germany

Ordinance on Industrial Safety and Health - Germany - BetrSichV

No flammable liquids in accordance with BetrSichV

Water hazard class (WGK) slightly hazardous to water (WGK 1)

TRGS - 510 Storage Class Storage Class 10 : Combustible liquids

Netherlands

List of Carcinogenic, mutagenic and reproductive toxin substances in accordance with Inspectorate SZW (Netherlands)

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15.2. Chemical safety assessment

Chemical Safety Assessments have been carried out by the Reach registrants for substances registered at >10 tpa. No Chemical Safety Assessment has been carried out for this mixture

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H226 - Flammable liquid and vapour
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H400 - Very toxic to aquatic life
H411 - Toxic to aquatic life with long lasting effects

Legend

TWA	TWA (time-weighted average)
STEL	STEL (Short Term Exposure Limit)
Ceiling	Ceiling Limit Value
*	Skin designation
SVHC	Substance(s) of Very High Concern
PBT	Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
vPvB	Very Persistent and very Bioaccumulative (vPvB) Chemicals
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
EWC	European Waste Catalogue

Key literature references and sources for data

No information available

Prepared By Product Safety & Regulatory Affairs

Revision Date: 17-Sep-2020

Indication of changes

Revision note SDS sections updated: 3, 8, 11, 12.

Training Advice No information available

Further information No information available

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

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