

Safety Data Sheet

Bostik Startac Outdoor Base & Hardener

Issued: 30/05/2017

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

1.1. Product identifier

Trade name: Bostik Startac Outdoor Base & Hardener

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

Recommended uses: 2-komp polyurethane adhesive

1.3. Details of the supplier of the safety data sheet

Supplier

Company: Bostik A/S
Address: Naverland 2
Zip code: Box 1480, 2600 Glostrup
Country: DENMARK
E-mail: info.dk@bostik.com
Phone: +44841500
Homepage: www.bostik.dk/

1.4. Emergency Telephone Number

+46 8 331231 (Swedish Poisons Informations Centre)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP-classification: Skin Irrit. 2;H315 Skin Sens. 1;H317 Eye Irrit. 2;H319 Acute Tox. 4;H332 Resp. Sens. 1A;H334 STOT SE 3;H335 Carc. 2;H351 STOT RE 2;H373

Most serious harmful effects: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Pictograms



Signal word: Danger

Contains

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Substance: Diphenylmethane diisocyanate, homologous and isomers; 4,4'-methylenediphenyl diisocyanate, diphenylmethane-4,4'-diisocyanate; o-(p-isocyanatobenzyl)phenyl isocyanate, diphenylmethane-2,4'-diisocyanate; 2,2'-methylenediphenyl diisocyanate, diphenylmethane-2,2'-diisocyanate

H-phrases

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

P-phrases

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 Wear respiratory protection.
P304/340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342/311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P261 Avoid breathing vapor/spray
P403+233 Store in a well-ventilated place. Keep container tightly closed.
P303+361+353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P308+313 IF exposed or concerned: Get medical advice/attention.

Supplemental information

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3. Other hazards

Reacts violently with amines and alcohol. In closed vessel penetrating water may cause gas formations, pressure increase or bursting the vessel.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	CAS number	EC No	REACH Reg. No.	Concentration	Notes	CLP-classification
Diphenylmethane diisocyanate, homologous and isomers	9016-87-9			50 < 100%		Skin Irrit. 2;H315 Skin Sens. 1;H317 Eye Irrit. 2;H319 Acute Tox. 4;H332 STOT SE 3;H335 Carc. 2;H351 STOT RE 2;H373
4,4'-methylenediphenyl diisocyanate, diphenylmethane-4,4'-diisocyanate	101-68-8	202-966-0	01-2119457014-47	10 < 20%		Skin Irrit. 2;H315 Skin Sens. 1;H317 Eye Irrit. 2;H319 Acute Tox. 4;H332 Resp. Sens. 1;H334 STOT SE 3;H335 Carc. 2;H351 STOT RE 2;H373
o-(p-isocyanatobenzyl)phenyl isocyanate, diphenylmethane-2,4'-diisocyanate	5873-54-1	227-534-9	01-2119480143	5 < 10%		Skin Irrit. 2;H315 Skin Sens. 1;H317 Eye Irrit. 2;H319 Acute Tox. 4;H332 Resp. Sens. 1;H334 STOT SE 3;H335 Carc. 2;H351 STOT RE 2;H373

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2,2'-methylenediphenyl diisocyanate, diphenylmethane-2,2'-diisocyanate	2536-05-2	219-799-4	01-2119927323-43	< 3%		Skin Irrit. 2;H315 Skin Sens. 1;H317 Eye Irrit. 2;H319 Acute Tox. 4;H332 Resp. Sens. 1;H334 STOT SE 3;H335 Carc. 2;H351 STOT RE 2;H373
Inorganic filler	-	-				
Castor oil	8001-79-4	2322938	01-2119984316-29			

Please see section 16 for the full text of H-phrases.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:	Fresh air and rest. In the event of breathing difficulties, place the injured person in a half-sitting position. Keep the affected person warm and at rest. Get prompt medical attention. Keep an eye on the injured person.
Ingestion:	Drink plenty of water. Immediately consult a doctor. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.
Skin contact:	Remove contaminated clothing. Wash contaminated clothing before reuse. Wash skin with soap and water. Seek medical advice in case of persistent discomfort.
Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids. Remove contact lenses. Contact physician.
Burns:	Flush with water until the pain stops and continue flushing for another 30 minutes.
General:	Remove victim immediately from source of exposure. Contact physician. When obtaining medical advice, show the safety data sheet or label. Never give anything by mouth to an unconscious person.

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

May cause allergic skin reaction. May cause severe allergic respiratory reaction. NOTE! Effects may be delayed. Keep affected person under observation.

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

When obtaining medical advice, show the safety data sheet or label.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media:	Extinguish with powder, carbon dioxide, foam or fine water mist.
Unsuitable extinguishing media:	Do not use a direct water jet that could spread the fire.

5.2. Special hazards arising from the substance or mixture

Risk of explosion if moisture gets into the sealed chamber. Formation of hazardous vapours may take place at decomposition temperatures.

5.3. Advice for fire-fighters

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Wear a self contained breathing apparatus.

Other Information: In the event of spillage involving the risk of environmental damage, get in touch with the authority responsible.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Avoid inhalation. Wear necessary protective equipment. Avoid contact with skin and eyes. Keep unnecessary people away, isolate hazard area and deny entry.

For emergency responders: Wear necessary protective equipment.

6.2. Environmental precautions

Isolate in all directions if small spill or leak. Prevent discharges into the sewage system, watercourses or ground.

6.3. Methods and material for containment and cleaning up

Soak up with sawdust, sand or other inert absorption material and collect for incineration. Collect the spillage into suitable containers for incineration. Prevent dispersion through damming with sand, earth or other suitable material.

6.4. Reference to other sections

See section 13 for instructions on disposal. See section 8 for type of protective equipment.

Other Information: Isocyanates may be neutralised using an aqueous solution of 5 % ammonia and 10 % isopropanol. Avoid discharge into drains, water or soil.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

The work place and work methods shall be organized in such a way that direct contact with the product is prevented. Work premises, furnishings, and equipment must be cleaned as often and to the extent necessary to avoid health risks. Provide good ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep containers tightly closed in closed original packaging or other closed metal or plastic vessel.

7.3. Specific end use(s)

See Product Data Sheet.

Other Information: Read this Material Safety Data Sheet before use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Measuring methods: Compliance with the stated exposure limits values must be checked regularly.

Other Information: Observe local regulations.

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8.2. Exposure controls

Exposure controls:	All work must be carried out under well-ventilated conditions. Wash hands before breaks, before using restroom facilities, and at the end of work. Do not eat, drink or smoke during work. Wear full protective clothing for prolonged exposure and/or high concentrations.
Appropriate engineering controls:	Technical measures: Ensure good general ventilation standards. use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below limits. Personal Precautions: Avoid skin contact with the product, wipe up the pollution / spills as soon as they arise. Wear gloves (tested to EN374) if hand contamination, wash away the impurities of the skin immediately. Wear suitable Coveralls protect against skin exposure. Provide basic training for employees to prevent / minimize exposures.
Personal protective equipment, eye/face protection:	Running water and eye wash equipment should be available. Use tight-fitting protective goggles.
Personal protective equipment, skin protection:	Wear appropriate clothing to prevent any possibility of skin contact.
Personal protective equipment, hand protection:	Protective gloves (chloroprene rubber, nitrile rubber, 4H). Breakthrough time:> 480 min
Personal protective equipment, respiratory protection:	Respirator with combined filter or breathing apparatus may be necessary. (A-P2).
Environmental exposure controls:	Ensure compliance with local regulations for emissions.
Heating hazards:	Poisonous and/or irritating vapours emitted when heated to decomposition.
Other Information:	Information from supplier: The product may cause allergies to oversensitive persons even in small quantities.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Parameter	Value/unit
State	Liquid
Colour	Tan.
Odour	Odourless or no characteristic odour. Earthy, musty
Solubility	No data
Explosive properties	Non-explosive
Oxidising properties	No data

Parameter	Value/unit	Remarks
pH (solution for use)	No data	
pH (concentrate)	No data	
Melting point	No data	
Freezing point	No data	
Initial boiling point and boiling range	No data	
Flash Point	~ 230 °C	
Evaporation rate	No data	
Flammability (solid, gas)	No data	
Flammability limits	No data	
Explosion limits	No data	
Vapour pressure	< 110 kPa	
Vapour density	No data	
Relative density	No data	
Partition coefficient n-octanol/water	No data	

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Auto-ignition temperature	No data	
Decomposition temperature	No data	
Viscosity	No data	
Odour threshold	No data	

9.2 Other information

Parameter	Value/unit	Remarks
Density	1.24 g/cm ³	

SECTION 10: Stability and reactivity

10.1. Reactivity

Exothermic reaction with amines and alcohols.

10.2. Chemical stability

The product is stable when used in accordance with the supplier's directions.

10.3. Possibility of hazardous reactions

Reacts violently with amines and alcohol. In closed vessel penetrating water may cause gas formations, pressure increase or bursting the vessel.

10.4. Conditions to avoid

Thermal decomposition: from approx. 200 ° C polymerization, carbon dioxide development. On contact with moisture the product cures forming an insoluble rubber.

10.5. Incompatible materials

Avoid contact with water, alcohols, amines and other materials that may react with isocyanates.

10.6. Hazardous decomposition products

Stable under recommended storage and handling conditions. Vapours that are harmful to health are formed on heating.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral:	Causes similar symptoms as by inhalation. May cause stomach ache. Polymethylenepolyphenyl isocyanate: LD50 Oral Rat, DOSE: 49 g/kg. 4,4'-methylenediphenyldiisocyanate: LD50 Oral Rat DOSE:> 9200 mg/kg. o-(p-isocyanatobenzyl)phenyl isocyanate: LD50 Oral Rat DOSE: > 2000 mg/kg.
Acute toxicity - dermal:	May cause sensitisation by skin contact. May cause smarting, redness and eczema.
Acute toxicity - inhalation:	May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure. Harmful if inhaled.
Skin corrosion/irritation:	Causes skin irritation.
Serious eye damage/eye irritation:	Causes serious eye irritation.

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Respiratory sensitisation or skin sensitisation: May cause allergy or asthma symptoms of breathing difficulties if inhaled. May cause an allergic skin reaction.

Carcinogenic properties: Suspected of causing cancer.

SECTION 12: Ecological information

12.1. Toxicity

Test data are not available.

12.2. Persistence and degradability

Test data are not available.

12.3. Bioaccumulative potential

Test data are not available.

12.4. Mobility in soil

Test data are not available.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Test data are not available.

Other Information

Avoid discharge into drains, water or soil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Shall be treated as chemical waste. The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Category of waste: 08 05 01* waste isocyanates

SECTION 14: Transport information

14.1. UN-No.: Not applicable.

14.2. UN proper shipping name: Not applicable.

14.3. Transport hazard class(es): Not applicable.

14.4. Packing group: Not applicable.

14.5. Environmental hazards: Not applicable.

14.6. Special precautions for user

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14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC code

SECTION 15: Regulatory information

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

Special Provisions: Safety, health and environmental regulations / legislation specific for the substance or mixture. EU Regulation (EC) No 1907/2006 (REACH).
People under the age of 18 must not be exposed this product. Council directive 94/33/EC.
The user of the product must have undergone special training in working with polyurethane and epoxy products.
EH40/2005 Workplace exposure limits incl. supplement from October 2007.

Authorisations / limitations: Only for professional use.

15.2. Chemical Safety Assessment

Other Information: For this product, no Chemical Safety Assessment in accordance with Directive (EC) 1907/2006 (REACH) has been carried out.

SECTION 16: Other information

Vendor notes: Version 3.
The information in this SDS is based on our current knowledge and on current EU and national laws. The product should not be used for other purposes than those specified under section 1 without first obtaining written handling instruction. It is always the user who has full responsibility to comply with the requirements of current legislation. The information in this SDS is meant as a description of safety requirements for the product and not a guarantee of product properties.

List of relevant H-statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
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