According to Regulation (EC) No 1907/2006

Topcoat hardener

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

1.1. Product identifier

Trade name

Topcoat hardener

Article No.

36-1986

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

Product type

Two-component coating for surface protection

1.3. Details of the supplier of the safety data sheet

Supplier

BILTEMA SWEDEN AB

Street address
Garnisonsgatan 26, 2nd FL
SE-254 66 Helsingborg
Sweden

Telephone
+46 77 520 00 00

Email
kundservice@biltema.com

Web site
www.biltema.se

1.4. Emergency telephone number

No data available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Hazard classes

Skin sensitisation, hazard category 1
Acute toxicity, inhalation, hazard category 4
Specific Target Organ Toxicity — Single exposure, hazard category 3
Hazardous to the aquatic environment — Chronic hazard category 3

Hazard statements

H317, H332, H335, H412

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Warning

Hazard statements

H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P312 Call a POISON CENTER/doctor if you feel unwell.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container to in accordance with local/regional/national/international regulations.
P362 + P364 Take off contaminated clothing and wash it before reuse.

More information

Contains :
HYDROPHILIC ALIPHATIC POLYISOCYANATE (BASED ON HDI)
HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER
HYDROPHILIC ALIPHATIC POLYISOCYANATE (BASED ON IPDI)
HEXAMETHYLENE-DI-ISOCYANATE
VOC (Directive 2004/42/EC):
Two-pack performance coatings. VOC given in g/litre of product in a ready-to-use condition. : 110,18
Maximum VOC content limit values exceeded. :140
Catalysed with 500%

2.3. Other hazards

This product does not contain any substances that are considered to be a PBT or vPvB substance.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER	3779-63-3 223-242-0 - -	≥20 - <30%	Acute Tox. 4 - inhalation, STOT SE 3, Skin Sens. 1	H317, H332, H335 - -	-
HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI	666723-27-9 679-494-0 - -	≥20 - <25%	STOT SE 3, Acute Tox. 4 - inhalation, Aquatic Acute 3, Skin Sens. 1	H317, H332, H335, H412 - -	-
HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON IPDI	1574548-27-8 808-295-5 - -	≥9 - <20%	STOT SE 3, Skin Sens. 1, Aquatic Chronic 3	H317, H335, H412 - -	-
HEXAMETHYLENE-DI-ISOCYANATE	822-06-0 212-485-8 01-2119457571-37-XXXX 615-011-00-1	<0.25%	Acute Tox. 4 - dermal, Acute Tox. 1 - inhalation, Eye Irrit. 2, Skin Irrit. 2, STOT SE 3, Resp. Sens. 1, Skin Sens. 1	H302, H315, H317, H319, H330, H334, H335 - -	-

Substance additional information

For the complete text of H- / EUH-statements mentioned in this section, see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

Eye contact

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician if irritation persists.

Ingestion

Rinse mouth with water. Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention.

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

No data available

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

water spray , foam , water spray, extinguishing powder or carbon dioxide

Unsuitable extinguishing media

Do NOT use water jet. Cool closed containers exposed to fire with water spray.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion In the event of fire and/or explosion do not breathe fumes.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Use jets of water to cool the containers to prevent product decomposition and the development of substances . Always wear full fire prevention gear. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep unauthorized and unprotected persons at a safe distance.

Additional information

See section 7 & 8.

6.2. Environmental precautions

Avoid discharge to soil, water or sewers

6.3. Methods and material for containment and cleaning up

Shovel into suitable container for disposal. Soak up with inert absorbent material. hazardous or special waste collection point.

6.4. Reference to other sections

See section 8,13,15.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions

Keep away from heat, sparks and open flame. - No smoking.
Prevent vapor buildup by providing adequate ventilation during and after use. Vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger. Take measures to prevent the build up of electrostatic charge
Do not eat, drink or smoke when using this product. Remove work clothes and protective equipment before meals. Take measures to prevent the build up of electrostatic charge
Avoid release to the environment.
The material does not pose a risk of explosion, but the storage rooms should be treated as potentially explosive
atmospheres in accordance with the relevant regulations.

General hygiene

Avoid contact with the skin and the eyes.
General industrial hygiene practice. Observe the generally applicable health and safety at work regulations.
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
Remove and wash contaminated clothing before re-use.

7.2. Conditions for safe storage, including any incompatibilities

Store in original container. Keep tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.
Do not store near incompatible materials. See section 10.
Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No data available

8.2. Exposure controls

Eye / face protection

Wear eye/face protection.

Hand protection

When handling the product, wear suitable protective gloves, eg nitrile rubber, chloroprene rubber, PVC according to EN374. The protective properties of gloves depend not only on the type of material from which they are made. The duration of the protective action can be different for different glove manufacturers. In the case of many substances, it is not possible to precisely estimate the protective time of gloves.
Taking into account the glove parameters given by the manufacturer, one should pay attention when using the product whether gloves still retain their protective properties.

Other skin protection

long sleeved clothing safety shoes Wash hands before breaks and at the end of workday.

Respiratory protection

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required. Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

Environmental exposure controls

The emissions generated by manufacturing processes, including those generated by ventilation equipment,
should be checked to ensure compliance with environmental standards.

Other

Wash hands before breaks and at the end of workday. Do not eat, drink or smoke when using this product. Avoid contact with the skin and the eyes. It is recommended to use
protective creams that lubricate the skin. Use only with adequate ventilation/personal protection.

Protective clothing

Remove and wash contaminated clothing before re-use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

transparent

Odour

characteristic

Melting point / freezing point
No data available

Boiling point or initial boiling point and boiling range
No data available

Flammability
No data available

Lower and upper explosion limit
No data available

Flash point
> 61 °C

Auto-ignition temperature
No data available

Decomposition temperature
No data available

pH
No data available

Kinematic viscosity
No data available

Solubility
No data available

Partition coefficient n-octanol/water
No data available

Vapour pressure
No data available

Density and/or relative density
No data available

Relative vapour density
No data available

VOC %
VOC (Directive 2004/42/EC): 30,00 % - 345,00 g/l

VOC (volatile carbon): 15,79 % - 181,59 g/l

9.2. Other information
No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable at normal conditions

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Stable under recommended storage conditions.

10.4. Conditions to avoid

No known However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

No information available

10.6. Hazardous decomposition products

No information available

Other

HYDROPHILIC ALIPHATIC POLYISOCYANATE (BASED ON HDI)

Amines and alcohols cause exothermic reactions. Evolution of CO_2 in closed containers causes overpressure and produces a risk of bursting.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT-single exposure

No data available

STOT-repeated exposure

the classification criteria are not met

Aspiration hazard

the classification criteria are not met

11.2. Information on other hazards

No data available

SECTION 12: Ecological information

12.1. Toxicity

Aquatic

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. HYDROPHILIC ALIPHATIC POLYISOCYANATE (BASED ON HDI) Reacts with water corresponding to the contact surface with the evolution of CO2 and forms a solid reaction product, insoluble high melting point (polyurea). This reaction is accelerated by surfactants (eg liquid soap) and water-soluble solvents. According to experience so far, polyurea is inert and non-degradable

Acute fish toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI 666723-27-9 / 679-494-0	LC50	35,2 mg/l	96h	Brachydanio rerio (zebra fish)
HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON IPDI 1574548-27-8 / 808-295-5	LC50	35,2 mg/l	96h	Brachydanio rerio (zebra fish)

Acute algae toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Method / Guideline
HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI 666723-27-9 / 679-494-0	EC50	> 72 mg/l	72h	-
HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON IPDI 1574548-27-8 / 808-295-5	EC50	72 mg/l	72h	OECD TG 201

Acute crustacean toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
HYDROPHILIC ALIPHATIC POLYISOCYANATE BASED ON HDI 666723-27-9 / 679-494-0	EC50	> 100 mg/l	48h	Daphnia magna (Water flea)

12.2. Persistence and degradability

Persistence and degradability

HYDROPHILIC ALIPHATIC POLYISOCYANATE (BASED ON HDI) Not readily biodegradable (.? % after .? days).

HYDROPHILIC ALIPHATIC POLYISOCYANATE (BASED ON IPDI) Not readily biodegradable (.? % after .? days).

12.3. Bioaccumulative potential

Bioaccumulative potential

No information available

12.4. Mobility in soil

Mobility

No information available

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

This product does not contain any substances that are considered to be a PBT or vPvB substance.

12.6. Endocrine disrupting properties

No information available

12.7. Other adverse effects

Other adverse effects

No information available

Other

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

/*D only*/Do not put rest of product into household waste. It should be given in the original package to the official waste disposal authorities. accordance with local/regional/national/international regulation for hazardous wastes an approved waste disposal plant

Packaging

Contaminated packaging Classified as hazardous waste according to (national equivalent of EC-Dir. 91/689; disposal of toxic and hazardous waste).

SECTION 14: Transport information

14.1. UN number

No data available

14.2. UN proper shipping name

No data available

14.3. Transport hazard class(es)

No data available

14.4. Packing group

No data available

14.5. Environmental hazards

No data available

14.6. Special precautions for user

No data available

14.7. Maritime transport in bulk according to IMO instruments

No data available

Other

No data available

SECTION 15: Regulatory information

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

EU regulations

CLP - Regulation (EC) No 1272/2008 EU Regulation (EC) No. 1907/2006 (REACH)

15.2. Chemical safety assessment

No data available

SECTION 16: Other information

Phrase meaning

STOT SE 3 - Specific Target Organ Toxicity — Single exposure, hazard category 3
Acute Tox. 4 - inhalation - Acute toxicity, inhalation, hazard category 4
Aquatic Acute 3 - Hazardous to the aquatic environment — Acute hazard category 3
Skin Sens. 1 - Skin sensitisation, hazard category 1
Aquatic Chronic 3 - Hazardous to the aquatic environment — Chronic hazard category 3
Acute Tox. 4 - dermal - Acute toxicity, dermal, hazard category 4
Acute Tox. 1 - inhalation - Acute toxicity, inhalation, hazard category 1
Eye Irrit. 2 - Eye irritation, hazard category 2
Skin Irrit. 2 - Skin irritation, hazard category 2
Resp. Sens. 1 - Respiratory sensitisation, hazard category 1
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.