Safety Data Sheet



according to Regulation (EC) No. 1907/2006 (REACH)

Thermon T-85 Heat Transfer Compound

Version number: 2.0 Replaces version of: 2016-03-17 (GHS 1) Revision: 2021-02-09

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

1.1 Product identifier

Trade name Registration number (REACH) Unique formula identifier (UFI) Thermon T-85 Heat Transfer Compound not relevant (mixture)

N600-K0SJ-R00W-02TG

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

Relevant identified uses

For use in heat tracing and various other applications to aid in the transfer of heat.

1.3 Details of the supplier of the safety data sheet

Thermon Europe B.V. Boezemweg 25 2641 KG Pijnacker PO Box: 205 2640 AE Pijnacker Netherlands

Telephone: +31 15 3615 370 e-mail: info@thermon.com Website: www.thermon.com

e-mail (competent person)

1.4 Emergency telephone number

Emergency information service

SDS@thermon.com

+01 (800) 820-4328 / +01 (512) 396-5801 / +01 (713) 205-2690 (24h) This number is only available during the following office hours: Mon-Fri 09:00 - 17:00

Poison centre		
Country	Name	Telephone
United Kingdom	National Poisons Information Service (NPIS) (medical professionals only)	0344-8920111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Section	Hazard class	Category	Hazard class and category	Hazard state- ment
3.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.4S	skin sensitisation	1	Skin Sens. 1	H317
3.7	reproductive toxicity	2	Repr. 2	H361fd
4.1C	hazardous to the aquatic environment - chronic hazard	2	Aquatic Chronic 2	H411



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Code	Supplemental hazard information
EUH205	contains epoxy constituents. May produce an allergic reaction

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

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

Warning

- signal word
- pictograms

GHS07, GHS08, GHS09



- hazard statements

nazara statements	
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child (if swallowed).
H411	Toxic to aquatic life with long lasting effects.

- precautionary statements

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P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- supplemental hazard information

EUH205 Contains epoxy constituents. May produce an allergic reaction.

- hazardous ingredients for labelling

2.3 Other hazards

Hazards arising from this product are primarily present when product is in the uncured state. Once hardened, the compound is non-hazardous; however dust that may result from mechanical disturbance can be hazardous. The uncured product is a viscous paste composed of epoxy resin, hardener and fillers. The product cures slowly upon exposure to air or more rapidly upon exposure to heat.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.



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SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

The product does not contain any other ingredients which are classified according to present knowledge of the supplier and contribute to the classification of the product and hence require reporting in this section.

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
4,4'-Isopropylidenedi- phenol, oligomeric reac- tion products with 1- chloro-2,3-epoxypro- pane	CAS No 25068-38-6 EC No 500-033-5 Index No 603-074-00-8 REACH Reg. No 01-2119456619- 26-xxxx	30 - 60	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1 / H317 Aquatic Chronic 2 / H411 EUH205		GHS-HC
Trichloro(N,N-dimethyl- octylamine)boron	CAS No 34762-90-8 EC No 252-200-4 REACH Reg. No 01-2120087201- 65-xxxx	1-5	Skin Sens. 1B / H317 Repr. 2 / H361 Aquatic Chronic 1 / H410		

Notes

GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/2008/EC, Annex VI)

Name of sub- stance	Identifier	Specific Conc. Limits	M-Factors	ATE	Exposure route
4,4'-Isopropylide- nediphenol, oligo- meric reaction products with 1- chloro-2,3- epoxypropane	CAS No 25068-38-6 EC No 500-033-5	Skin Irrit. 2; H315: C ≥ 5 % Eye Irrit. 2; H319: C ≥ 5 %	-	-	

Remarks

For full text of H-phrases: see SECTION 16. All the percentages given are percentages by weight unless stated otherwise.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician.



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Following skin contact

Wash with plenty of soap and water. Call a POISON CENTER/doctor.

Following eye contact

Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor. If eye irritation persists: Get medical advice/attention.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Call a POISON CENTER or doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

If inhaled

May cause respiratory irritation.

If on skin

Causes skin irritation. May cause an allergic skin reaction.

If in eyes

Causes serious eye irritation.

If swallowed

May cause gastrointestinal irritation.

4.3 Indication of any immediate medical attention and special treatment needed

For specialist advice physicians should contact the poison centre.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray; Alcohol resistant foam; Dry extinguishing powder; Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet.

5.2 Special hazards arising from the substance or mixture

In a fire or if heated, (within the uncured product in the original packaging) a pressure increase within the container may result and the container may burst.

Hazardous combustion products

The product is not combustible. During fire hazardous fumes/smoke could be produced. Carbon monoxide (CO). Carbon diox-ide (CO2). Hydrocarbons.

5.3 Advice for firefighters

Keep containers cool with water spray. In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

Self-contained breathing apparatus (EN 133). Standard protective clothing for firefighters.



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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety. Ventilate affected area.

For emergency responders Wear breathing apparatus if exposed to vapours/dust/spray/gases. Use personal protective equipment as required.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece).

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. In the uncured state the material is a viscous paste. Using appropriate tools and PPE collect uncured material and place into a closed container. Compound will harden over a time period of weeks, if undiluted, in air. Hardening is accelerated with the application of heat. In the hardened state, scrape, chisel or grind areas and collect the dry residue. This material and its container must be disposed of in a safe way, and as per local legislation.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- flammability hazards

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge.

- incompatible substances or mixtures

Keep away from alkalis, heavy metals and their salts, reducing agents, ammonium compounds, acids.

Control of effects

Protect against external exposure, such as

High temperatures. UV-radiation/sunlight.



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Consideration of other advice

Store in a well-ventilated place. Keep container tightly closed.

- specific designs for storage rooms or vessels
- storage temperature

Room temperature

packaging compatibilities

Keep only in original container. Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

There is no additional information.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

No information available.

Relevant DNELs/DMELs/PNECs and other threshold levels

Name of sub- stance	CAS No	End- point	Threshold level	Protection goal, route of expos- ure	Used in	Exposure time
4,4'-Isopropylidenedi- phenol, oligomeric re- action products with 1-chloro-2,3- epoxypropane	25068-38-6	DNEL	8.33 mg/kg	human, dermal	worker (industry)	acute - systemic ef- fects
4,4'-Isopropylidenedi- phenol, oligomeric re- action products with 1-chloro-2,3- epoxypropane	25068-38-6	DNEL	12.25 mg/ m ³	human, inhalatory	worker (industry)	acute - systemic ef- fects
4,4'-Isopropylidenedi- phenol, oligomeric re- action products with 1-chloro-2,3- epoxypropane	25068-38-6	DNEL	8.33 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
4,4'-Isopropylidenedi- phenol, oligomeric re- action products with 1-chloro-2,3- epoxypropane	25068-38-6	DNEL	12.25 mg/ m ³	human, inhalatory	worker (industry)	chronic - systemic effects
4,4'-Isopropylidenedi- phenol, oligomeric re- action products with 1-chloro-2,3- epoxypropane	25068-38-6	DNEL	0.75 mg/kg	human, oral	consumer (private households)	acute - systemic ef- fects
4,4'-Isopropylidenedi- phenol, oligomeric re- action products with 1-chloro-2,3- epoxypropane	25068-38-6	DNEL	0.75 mg/kg	human, oral	consumer (private households)	chronic - systemic effects



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Name of sub- stance	CAS No	End- point	Threshold level	Protection goal, route of expos- ure	Used in	Exposure time
4,4'-Isopropylidenedi- phenol, oligomeric re- action products with 1-chloro-2,3- epoxypropane	25068-38-6	DNEL	3.571 mg/ kg	human, dermal	consumer (private households)	acute - systemic ef- fects
4,4'-Isopropylidenedi- phenol, oligomeric re- action products with 1-chloro-2,3- epoxypropane	25068-38-6	DNEL	3.571 mg/ kg	human, dermal	consumer (private households)	chronic - systemic effects
Trichloro(N,N-di- methyloctylamine)bor on	34762-90-8	DNEL	3.5 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
Trichloro(N,N-di- methyloctylamine)bor on	34762-90-8	DNEL	1 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic effects

Name of sub-	CAS No	End-	Threshold	Organism	Environmental	Exposure time
stance		point	level		compartment	
4,4'-Isopropylidenedi- phenol, oligomeric re- action products with 1-chloro-2,3- epoxypropane	25068-38-6	PNEC	0.006 ^{mg} / _l	aquatic organisms	freshwater	short-term (single instance)
4,4'-Isopropylidenedi- phenol, oligomeric re- action products with 1-chloro-2,3- epoxypropane	25068-38-6	PNEC	0.0006 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)
4,4'-Isopropylidenedi- phenol, oligomeric re- action products with 1-chloro-2,3- epoxypropane	25068-38-6	PNEC	10 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
4,4'-Isopropylidenedi- phenol, oligomeric re- action products with 1-chloro-2,3- epoxypropane	25068-38-6	PNEC	0.996 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single instance)
4,4'-Isopropylidenedi- phenol, oligomeric re- action products with 1-chloro-2,3- epoxypropane	25068-38-6	PNEC	0.0996 ^{mg} / kg	aquatic organisms	marine sediment	short-term (single instance)
4,4'-Isopropylidenedi- phenol, oligomeric re- action products with 1-chloro-2,3- epoxypropane	25068-38-6	PNEC	11 ^{mg} / _{kg}	aquatic organisms	water	short-term (single instance)



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Relevant PNECs of c	Relevant PNECs of components of the mixture									
Name of sub- stance	CAS No	End- point	Threshold level	Organism	Environmental compartment	Exposure time				
4,4'-Isopropylidenedi- phenol, oligomeric re- action products with 1-chloro-2,3- epoxypropane	25068-38-6	PNEC	0.196 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)				
4,4'-Isopropylidenedi- phenol, oligomeric re- action products with 1-chloro-2,3- epoxypropane	25068-38-6	PNEC	0.018 ^{mg} / _l	aquatic organisms	water	intermittent release				
Trichloro(N,N-di- methyloctylamine)bor on	34762-90-8	PNEC	0 ^{mg} / _l	aquatic organisms	freshwater	short-term (single instance)				
Trichloro(N,N-di- methyloctylamine)bor on	34762-90-8	PNEC	0 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)				
Trichloro(N,N-di- methyloctylamine)bor on	34762-90-8	PNEC	100 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)				
Trichloro(N,N-di- methyloctylamine)bor on	34762-90-8	PNEC	0.043 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single instance)				
Trichloro(N,N-di- methyloctylamine)bor on	34762-90-8	PNEC	0.004 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)				
Trichloro(N,N-di- methyloctylamine)bor on	34762-90-8	PNEC	0.009 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)				

8.2 **Exposure controls**

Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Individual protection measures (personal protective equipment)

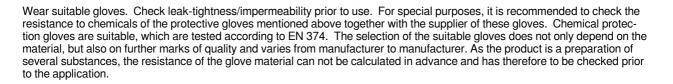
Eye/face protection

Use safety goggle with side protection (EN 166).

Skin protection

Protective clothing (EN 340 & EN ISO 13688).

- hand protection









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- type of material

PVC: polyvinyl chloride, PE: polyethylene, NP: Neoprene, Nitrile/butadiene rubber, EVAL: Ethyl vinyl alcohol laminate, Vinyl

- material thickness

Use gloves with a minimum material thickness: \geq 0,38 mm.

- breakthrough times of the glove material

Use gloves with a minimum breakthrough times of the glove material: >480 minutes (permeation: level 6).

- other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling. Provide eyewash stations and safety showers at the workplace.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Particulate filter device (EN 143). P3 (filters at least 99,95 % of airborne particles, colour code: White).

Environmental exposure controls

Take appropriate precautions to avoid uncontrolled release into the environment. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid (paste)
Colour	black
Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	not determined
Flammability	non-combustible
Lower and upper explosion limit	LEL: UEL: not determined
Flash point	251 °C (PMcc ASTM D93)
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	not determined
Kinematic viscosity	not determined
Solubility(ies)	not determined



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Partition coefficient n-octanol/water (log value)	3.24 (25 °C) (OASIS CATALOGIC QSAR)		
Soil organic carbon/water (log KOC)	2.65		

Vapour pressure	not determined
Density	not determined
Relative density	1.5 at 20 °C (water = 1)

Particle characteristics	not relevant (liquid)
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9.2 Other information

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant		
Other safety characteristics	there is no additional information		

SECTION 10: Stability and reactivity

10.1 Reactivity

In a fire or if heated, (within the uncured product in the original packaging) a pressure increase within the container may result and the container may burst.

10.2 Chemical stability

The compound is stable when used in its recommended temperature range.

10.3 Possibility of hazardous reactions

The compound may react with other curing agents and generate a considerable heat release.

10.4 Conditions to avoid

High temperature will cause a hardening effect that is intended per the use of product. There is no known effect on the material with exposure to light or shock. Exposure to moisture may affect the curing process. Keep away from open flames.

10.5 Incompatible materials

Compound can react with strong oxidizing agents, strong Lewis or mineral acids, and strong alkalis. Polymerizes exothermically with amines, mercaptans, and Lewis acids at ambient temperature and above. Caustic soda (sodium hydroxide) can induce vigorous polymerization at temperatures around 200 °C (392 °F).

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5. Under normal conditions of storage and use, hazardous decomposition products should not be produced.



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SECTION 11: Toxicological information

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

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Shall not be classified as acutely toxic.

- acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3- epoxypropane	25068-38-6	oral	LD50	>2,000 ^{mg} / _{kg}	rat
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3- epoxypropane	25068-38-6	dermal	LD50	>2,000 ^{mg} / _{kg}	rat
Trichloro(N,N- dimethyloctylamine)boron	34762-90-8	oral	LD50	>5,000 ^{mg} / _{kg}	rat

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Suspected of damaging the unborn child (if swallowed). Suspected of damaging fertility (if swallowed).

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.



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Other information

Hazards arising from this product are primarily present when product is in the uncured state. Once hardened, the compound is non-hazardous; however dust that may result from mechanical disturbance can be hazardous. Once hardened, the compound is non hazardous. Cutting, grinding, crushing, or drilling hardened compound may generate dust containing silica, graphite, and/or inorganic colorant. The dust may irritate the nose, throat, and respiratory tract. Coughing, sneezing, chest pain, shortness of breath, inflammation of mucous membrane, and flu-like fever may occur following exposures in excess of appropriate exposure limits. Pre-existing respiratory conditions may be aggravated when in the presence of dust.

11.2 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
4,4'-Isopropylidenediphenol, oligo- meric reaction products with 1- chloro-2,3-epoxypropane	25068-38-6	LC50	2.7 ^{mg} / _l	fish	48 h
4,4'-Isopropylidenediphenol, oligo- meric reaction products with 1- chloro-2,3-epoxypropane	25068-38-6	EC50	2.8 ^{mg} / _l	aquatic invertebrates	48 h
4,4'-Isopropylidenediphenol, oligo- meric reaction products with 1- chloro-2,3-epoxypropane	25068-38-6	ErC50	>11 ^{mg} / _l	algae	72 h
4,4'-Isopropylidenediphenol, oligo- meric reaction products with 1- chloro-2,3-epoxypropane	25068-38-6	NOEC	2.4 ^{mg} / _l	algae	72 h
Trichloro(N,N- dimethyloctylamine)boron	34762-90-8	LC50	>100 ^{mg} / _l	fish	96 h
Trichloro(N,N- dimethyloctylamine)boron	34762-90-8	EC50	>0.75 ^{mg} / _l	aquatic invertebrates	48 h
Trichloro(N,N- dimethyloctylamine)boron	34762-90-8	ErC50	0.13 ^{mg} / _l	algae	72 h
Trichloro(N,N- dimethyloctylamine)boron	34762-90-8	NOEC	0.22 ^{mg} / _l	aquatic invertebrates	48 h
Trichloro(N,N- dimethyloctylamine)boron	34762-90-8	LOEC	0.4 ^{mg} / _l	aquatic invertebrates	48 h

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
4,4'-Isopropylidenediphenol, oligo- meric reaction products with 1- chloro-2,3-epoxypropane	25068-38-6	LC50	4.4 ^{mg} / _l	fish	24 h
4,4'-Isopropylidenediphenol, oligo- meric reaction products with 1- chloro-2,3-epoxypropane	25068-38-6	EC50	4.6 ^{mg} / _l	aquatic invertebrates	24 h



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Aquatic toxicity (chronic) of components of the mixture						
Name of substance	CAS No	Endpoint	Value	Species	Exposure time	
4,4'-Isopropylidenediphenol, oligo- meric reaction products with 1- chloro-2,3-epoxypropane	25068-38-6	NOEC	0.3 ^{mg} / _l	aquatic invertebrates	21 d	
4,4'-Isopropylidenediphenol, oligo- meric reaction products with 1- chloro-2,3-epoxypropane	25068-38-6	LOEC	1 ^{mg} / _l	aquatic invertebrates	21 d	
4,4'-Isopropylidenediphenol, oligo- meric reaction products with 1- chloro-2,3-epoxypropane	25068-38-6	growth (EbCx) 10%	100 ^{mg} / _l	microorganisms	3 h	
Trichloro(N,N- dimethyloctylamine)boron	34762-90-8	growth (EbCx) 10%	>10,000 ^{mg} / _l	microorganisms	16 h	

12.2 Persistence and degradability

This material is not persistent in aquatic systems. It is high in pH, (when undiluted and/or not neutralized) which is acutely harmful to aquatic life. Diluted material rapidly de-polymerizes to yield dissolved silica (not distinguishable from natural dissolved silica). It does not contribute to BOD. This material does not bioaccumulate except in species that use silica as a structural material such as siliceous sponges and diatoms. The addition of excess dissolved silica over the limiting concentrations will not stimulate the growth of diatom populations. Neither silica nor sodium will appreciably bio-concentrate up the food chain.

Process of degradability				
Process	Degradation rate	Time		
biotic/abiotic	5 %	28 d		
biotic/abiotic	6 – 12 %	28 d		

Degradability of components of the mixture						
Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
4,4'-Isopropylidenediphenol, oligo- meric reaction products with 1- chloro-2,3-epoxypropane	25068-38-6	oxygen depletion	5 %	28 d		ECHA
Trichloro(N,N- dimethyloctylamine)boron	34762-90-8	carbon dioxide gen- eration	>10 %	28 d		ECHA
Trichloro(N,N- dimethyloctylamine)boron	34762-90-8	oxygen depletion	42 %	28 d		ECHA

12.3 Bioaccumulative potential

n-octanol/water (log KOW)	3.24 (25 °C) (OASIS CATALOGIC QSAR)		
BCF	3 – 31 (OASIS CATALOGIC QSAR)		



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Bioaccumulative potential of comp	ponents of the mix	ture		
Name of substance	CAS No	BCF	Log KOW	BOD5/COD
4,4'-Isopropylidenediphenol, oligo- meric reaction products with 1- chloro-2,3-epoxypropane	25068-38-6		2.918 (25 °C)	
Trichloro(N,N- dimethyloctylamine)boron	34762-90-8		5.77 (25 °C)	

12.4 Mobility in soil

The Organic Carbon normalised adsorption coefficient	2.65 (KOCWIN QSAR)
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12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

None of the ingredients are listed.

12.7 Other adverse effects

The alkalinity of this material will have a local effect on ecosystems sensitive to changes in pH.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of cured compound in an industrial waste facility or landfill having appropriate permits. Alternately, cured compound may be disposed of in a waste incineration facility having proper permitting. Prevent discharges to streams or sewer systems.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1	UN number or ID number	
	ADR/RID/ADN	UN 3082
	IMDG-Code	UN 3082
	ICAO-TI	UN 3082
14.2	UN proper shipping name	
	ADR/RID/ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
	IMDG-Code	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
	ICAO-TI	Environmentally hazardous substance, liquid, n.o.s.



Version number: 2.0 Revision: 2021-02-09 Replaces version of: 2016-03-17 (GHS 1) Technical name (Hazardous ingredients) 14.3 Transport hazard class(es) 9 ADR/RID/ADN 9 IMDG-Code 9 ICAO-TI 14.4 Packing group Ш ADR/RID/ADN Ш IMDG-Code Ш ICAO-TI 14.5 Environmental hazards hazardous to the aquatic environment Environmentally hazardous substance (aquatic 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1chloro-2,3-epoxypropane, Trichloro(N,N-dimethyloctylamine)boron environment) 14.6 Special precautions for user Provisions for dangerous goods (ADR) should be complied within the premises. Maritime transport in bulk according to IMO instruments 14.7

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - additional information

Classification code	M6
Danger label(s)	9, fish and tree
Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	274, 335, 375, 601
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Tunnel restriction code (TRC)	-
Hazard identification No	90
Emergency Action Code	3Z
International Maritime Dangerous Goods Code (IM	IDG) - additional information
Marine pollutant	yes (hazardous to the aquatic environment) (bisphenol-A-epichlorohydrine, epoxyresin (average molecularweight \leq 700))
Danger label(s)	9, fish and tree
Special provisions (SP)	274, 335, 969

Special provisions (SP)



Version number: 2.0 Replaces version of: 2016-03-17 (GHS 1)	Revision: 2021-02-09
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-A, S-F
Stowage category	A
International Civil Aviation Organization (ICAO-IA	ΓA/DGR) - additional information
Environmental hazards	yes (hazardous to the aquatic environment)
Danger label(s)	9, fish and tree
Special provisions (SP)	A97, A158, A197
Excepted quantities (EQ)	E1
Limited quantities (LQ)	30 kg

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU) Restrictions according to REACH, Annex XVII

Name	Name acc. to inventory	Restriction	No
Thermon T-85 Heat Transfer Compound	this product meets the criteria for classification in accordance with Regulation No 1272/2008/ EC	R3	3

Legend

R3

1. Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,

- tricks and jokes,

- games for one or more participants, or any article intended to be used as such, even with ornamental aspects,

2. Articles not complying with paragraph 1 shall not be placed on the market.

3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: - can be used as fuel in decorative oil lamps for supply to the general public, and,

- present an aspiration hazard and are labelled with R65 or H304,

 Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).
 Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dan-

5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met: (a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: 'Keep lamps filled with this liquid out of the reach of children'; and, by 1 December 2010, 'Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage';

(b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter may lead to life threatening lung damage';

(c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.

6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.

7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

None of the ingredients are listed.



Version number: 2.0 Replaces version of: 2016-03-17 (GHS 1) Revision: 2021-02-09

Seveso Directive

2012/1	8/EU (Seveso III)			
No	Dangerous substance/hazard categories	Qualifying quantity (to tion of lower and up)	onnes) for the applica- per-tier requirements	Notes
E2	environmental hazards (hazardous to the aquatic environ- ment, cat. 2)	200	500	57)

Notation

57) hazardous to the Aquatic Environment in category Chronic 2

Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

None of the ingredients are listed.

Water Framework Directive (WFD)

Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
4,4'-Isopropylidenediphenol, oligo- meric reaction products with 1- chloro-2,3-epoxypropane	Organohalogen compounds and substances which may form such compounds in the aquatic environ- ment		A)	
Trichloro(N,N- dimethyloctylamine)boron	Organohalogen compounds and substances which may form such compounds in the aquatic environ- ment		A)	
Trichloro(N,N- dimethyloctylamine)boron	Substances and preparations, or the breakdown products of such, which have been proved to possess carci- nogenic or mutagenic properties or properties which may affect steroido- genic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment		A)	

 $\frac{\text{Legend}}{\text{A}}$

Indicative list of the main pollutants

Regulation 98/2013/EU on the marketing and use of explosives precursors

None of the ingredients are listed.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)
1.1		Unique formula identifier (UFI): N600-K0SJ-R00W-02TG



Version number: 2.0 Replaces version of: 2016-03-17 (GHS 1)

Section	Former entry (text/value)	Actual entry (text/value)
1.4		Emergency information service: +01 (800) 820-4328 / +01 (512) 396-5801 / +01 (713 205-2690 (24h) This number is only available during the following offic hours: Mon-Fri 09:00 - 17:00
2.1	Supplemental hazard information: Hazards arising from this product are primarily present when product is in the uncured state. Once hardened, the compound is non-hazardous; however dust that may res- ult from mechanical disturbance can be hazardous.	
2.2	Hazardous ingredients for labelling: bisphenol-A-epichlorohydrine, epoxyresin (average mo- lecularweight ≤ 700)	 hazardous ingredients for labelling: 4,4'-Isopropylidenediphenol, oligomeric reaction produ with 1-chloro-2,3-epoxypropane; Trichloro(N,N-dimeth octylamine)boron
3.2	Mixtures	Mixtures: The product does not contain any other ingredients wh are classified according to present knowledge of the su plier and contribute to the classification of the product a hence require reporting in this section.
3.2		Remarks: For full text of H-phrases: see SECTION 16. All the percentages given are percentages by weight unless stat otherwise.
4.1	Following skin contact: Wash with plenty of soap and water.	Following skin contact: Wash with plenty of soap and water. Call a POISON CENTER/doctor.
4.1	Following eye contact: Remove contact lenses, if present and easy to do. Contin- ue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.	Following eye contact: Irrigate copiously with clean, fresh water for at least 1 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Ca POISON CENTER/doctor. If eye irritation persists: G medical advice/attention.
4.1	Following ingestion: Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.	Following ingestion: Rinse mouth with water (only if the person is consciou Do NOT induce vomiting. Call a POISON CENTER o doctor if you feel unwell.
4.2	Most important symptoms and effects, both acute and delayed: Symptoms and effects are not known to date.	Most important symptoms and effects, both acute an delayed
4.2		If inhaled: May cause respiratory irritation.
4.2		If on skin: Causes skin irritation. May cause an allergic skin rea- tion.
4.2		If in eyes: Causes serious eye irritation.
4.2		If swallowed: May cause gastrointestinal irritation.
4.3	Indication of any immediate medical attention and special treatment needed: none	Indication of any immediate medical attention and spectreatment needed: For specialist advice physicians should contact the po on centre.
5.1	Suitable extinguishing media: the product is not combustible, co-ordinate firefighting measures to the fire surroundings	Suitable extinguishing media: Water spray; Alcohol resistant foam; Dry extinguishin powder; Carbon dioxide (CO2)



Version number: 2.0 Replaces version of: 2016-03-17 (GHS 1)

Section	Former entry (text/value)	Actual entry (text/value)
5.1		Unsuitable extinguishing media: Water jet.
5.2	Special hazards arising from the substance or mixture	Special hazards arising from the substance or mixture: In a fire or if heated, (within the uncured product in the ori ginal packaging) a pressure increase within the containe may result and the container may burst.
5.2	Hazardous combustion products: carbon monoxide (CO), carbon dioxide (CO2)	Hazardous combustion products: The product is not combustible. During fire hazardous fumes/smoke could be produced. Carbon monoxide (CO). Carbon dioxide (CO2). Hydrocarbons.
5.3	Advice for firefighters: In case of fire and/or explosion do not breathe fumes. Co- ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separ- ately. Fight fire with normal precautions from a reason- able distance.	Advice for firefighters: Keep containers cool with water spray. In case of fire and/or explosion do not breathe fumes. Co-ordinate fire fighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Col- lect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.
5.3		Special protective equipment for firefighters: Self-contained breathing apparatus (EN 133). Standard protective clothing for firefighters.
6.1	For non-emergency personnel: Remove persons to safety.	For non-emergency personnel: Remove persons to safety. Ventilate affected area.
6.1	For emergency responders: Wear breathing apparatus if exposed to vapours/dust/ spray/gases.	For emergency responders: Wear breathing apparatus if exposed to vapours/dust/ spray/gases. Use personal protective equipment as re- quired.
6.2	Environmental precautions: Keep away from drains, surface and ground water. Re- tain contaminated washing water and dispose of it.	Environmental precautions: Keep away from drains, surface and ground water. Re- tain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.
6.3	Advices on how to clean up a spill: Take up mechanically. Wipe up with absorbent material (e.g. cloth, fleece).	Advice on how to clean up a spill: Wipe up with absorbent material (e.g. cloth, fleece).
6.3		Appropriate containment techniques: Use of adsorbent materials.
6.3	Other information relating to spills and releases: Place in appropriate containers for disposal. Ventilate af- fected area.	Other information relating to spills and releases: Place in appropriate containers for disposal. In the un- cured state the material is a viscous paste. Using appro priate tools and PPE collect uncured material and place into a closed container. Compound will harden over a tim period of weeks, if undiluted, in air. Hardening is acceler ated with the application of heat. In the hardened state, scrape, chisel or grind areas and collect the dry residue This material and its container must be disposed of in a safe way, and as per local legislation.
7.2		- flammability hazards: Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge.
7.2	Incompatible substances or mixtures: Keep in a cool, well-ventilated place away from acids, al- kalis, heavy metal salts and reducing substances.	 - incompatible substances or mixtures: Keep away from alkalis, heavy metals and their salts, reducing agents, ammonium compounds, acids.
7.2		Protect against external exposure, such as: High temperatures. UV-radiation/sunlight.



Version number: 2.0 Replaces version of: 2016-03-17 (GHS 1)

Section	Former entry (text/value)	Actual entry (text/value)
7.2	Consideration of other advice	Consideration of other advice: Store in a well-ventilated place. Keep container tight closed.
7.2		Storage temperature: Room temperature
7.2	 Packaging compatibilities: Only packagings which are approved (e.g. acc. to ADR) may be used. 	- packaging compatibilities: Keep only in original container. Only packagings whi are approved (e.g. acc. to ADR) may be used.
8.2	Appropriate engineering controls: General ventilation.	Appropriate engineering controls: Provide adequate general and local exhaust ventilation
8.2	Skin protection	Skin protection: Protective clothing (EN 340 & EN ISO 13688).
8.2	 hand protection: Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leaktightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. 	Hand protection: safety gloves must be worn Wear suitable gloves. Check leak-tightness/impermeatity prior to use. For special purposes, it is recomment to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Chemical protection gloves are suitable which are tested according to EN 374. The selection the suitable gloves does not only depend on the mater but also on further marks of quality and varies from mater facturer to manufacturer. As the product is a preparat of several substances, the resistance of the glove mater al can not be calculated in advance and has therefore be checked prior to the application.
8.2	 type of material: safety gloves must be worn IIR: isobutene-isoprene (butyl) rubber 	Type of material: PVC: polyvinyl chloride, PE: polyethylene, NP: Neopre Nitrile/butadiene rubber, EVAL: Ethyl vinyl alcohol lan ate, Vinyl
8.2	• material thickness: > 0.6 mm.	Material thickness: Use gloves with a minimum material thickness: ≥ 0, mm.
8.2	 breakthrough times of the glove material: >480 minutes (permeation: level 6) 	Breakthrough times of the glove material: Use gloves with a minimum breakthrough times of th glove material: >480 minutes (permeation: level 6)
8.2	• other protection measures: Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommen- ded. Wash hands thoroughly after handling.	- other protection measures: Take recovery periods for skin regeneration. Prevent skin protection (barrier creams/ointments) is recomm ded. Wash hands thoroughly after handling. Provide of wash stations and safety showers at the workplace
8.2	Respiratory protection: wear easy duty In case of inadequate ventilation wear respiratory protec- tion. P3 (filters at least 99,95 % of airborne particles, col- our code: White).	Respiratory protection: In case of inadequate ventilation wear respiratory prot tion. Particulate filter device (EN 143). P3 (filters at le 99,95 % of airborne particles, colour code: White).
8.2	Environmental exposure controls: Use appropriate container to avoid environmental con- tamination. Keep away from drains, surface and ground water.	Environmental exposure controls: Take appropriate precautions to avoid uncontrolled r lease into the environment. Keep away from drains, s face and ground water.
9.1	Initial boiling point and boiling range:	Boiling point or initial boiling point and boiling range



Version number: 2.0 Replaces version of: 2016-03-17 (GHS 1)

Section	Former entry (text/value)	Actual entry (text/value)
9.1	Flammability (solid, gas): not relevant (fluid) non-flammable	Flammability: non-combustible
9.1	Explosive limits: not determined	Lower and upper explosion limit: LEL: UEL: not determined
9.1	Flash point: 251 °C (DIN EN ISO 2719)	Flash point: 251 °C (PMcc ASTM D93)
9.1	Evaporation rate: not determined	
9.1		Decomposition temperature: not relevant
9.1		Kinematic viscosity: not determined
9.1	Viscosity: not determined	
9.1	Explosive properties: none	
9.1	Oxidising properties: none	
9.1	n-octanol/water (log KOW): this information is not available	Partition coefficient n-octanol/water (log value): 3.24 (25 °C) (OASIS CATALOGIC QSAR)
9.1		Soil organic carbon/water (log KOC): 2.65
9.1	Vapour pressure: 0.03 Pa at 77 °C	Vapour pressure: not determined
9.1	Relative density: 1.44 (water = 1)	Relative density: 1.5 at 20 °C (water = 1)
9.1		Particle characteristics: not relevant (liquid)
9.2		Information with regard to physical hazard classes: hazard classes acc. to GHS (physical hazards): not rele ant
9.2		Other safety characteristics: there is no additional information
10.1	Reactivity: Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".	Reactivity: In a fire or if heated, (within the uncured product in the or ginal packaging) a pressure increase within the contair may result and the container may burst.
10.2	Chemical stability: See below "Conditions to avoid".	Chemical stability: The compound is stable when used in its recommende temperature range.
10.3	Possibility of hazardous reactions: No known hazardous reactions.	Possibility of hazardous reactions: The compound may react with other curing agents an generate a considerable heat release.
10.4	Conditions to avoid: High temperature will cause a hardening effect that is in- tended per the use of product.	Conditions to avoid: High temperature will cause a hardening effect that is i tended per the use of product. There is no known effe on the material with exposure to light or shock. Exposu to moisture may affect the curing process. Keep awa from open flames.



Version number: 2.0 Replaces version of: 2016-03-17 (GHS 1)

Section	Former entry (text/value)	Actual entry (text/value)
10.4	Physical stresses which might result in a hazardous situ- ation and have to be avoided: strong shocks	
10.6	Hazardous decomposition products: Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.	Hazardous decomposition products: Hazardous combustion products: see section 5. Und normal conditions of storage and use, hazardous deco position products should not be produced.
11.1		Reproductive toxicity: Suspected of damaging the unborn child (if swallowed Suspected of damaging fertility (if swallowed).
11.2		Information on other hazards: There is no additional information.
12.1	Aquatic toxicity (chronic): May cause long-term adverse effects in the aquatic envir- onment.	
12.3	Bioaccumulative potential: Data are not available.	Bioaccumulative potential
12.3		n-octanol/water (log KOW): 3.24 (25 °C) (OASIS CATALOGIC QSAR)
12.3		BCF: 3 – 31 (OASIS CATALOGIC QSAR)
12.4	Mobility in soil: Data are not available.	Mobility in soil
12.4		The Organic Carbon normalised adsorption coefficier 2.65 (KOCWIN QSAR)
12.5	Results of PBT and vPvB assessment: Data are not available.	Results of PBT and vPvB assessment: This mixture does not contain any substances that are sessed to be a PBT or a vPvB.
13.1	Waste treatment methods	Waste treatment methods: Dispose of cured compound in an industrial waste faci or landfill having appropriate permits. Alternately, cure compound may be disposed of in a waste incineration cility having proper permitting. Prevent discharges to streams or sewer systems.
13.1	Sewage disposal-relevant information: Do not empty into drains. Avoid release to the environ- ment. Refer to special instructions/safety data sheets.	Sewage disposal-relevant information: Do not empty into drains. Avoid release to the enviro ment.
13.1	Waste treatment of containers/packagings: It is a dangerous waste; only packagings which are ap- proved (e.g. acc. to ADR) may be used. Completely emp- tied packages can be recycled. Handle contaminated packages in the same way as the substance itself.	Waste treatment of containers/packagings: It is a dangerous waste; only packagings which are a proved (e.g. acc. to ADR) may be used. It is a dangero waste; only packagings which are approved (e.g. acc. ADR) may be used. Completely emptied packages ca be recycled. Handle contaminated packages in the sa way as the substance itself.
14.1	UN number: 3082	UN number or ID number
14.1		ADR/RID/ADN: UN 3082
14.1		IMDG-Code: UN 3082
14.1		ICAO-TI: UN 3082



Version number: 2.0 Replaces version of: 2016-03-17 (GHS 1)

Section	Former entry (text/value)	Actual entry (text/value)
14.2	UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LI- QUID, N.O.S.	UN proper shipping name
14.2		ADR/RID/ADN: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LI QUID, N.O.S.
14.2		IMDG-Code: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LI QUID, N.O.S.
14.2		ICAO-TI: Environmentally hazardous substance, liquid, n.o.s.
14.2	Hazardous ingredients: 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	Technical name (Hazardous ingredients): 4,4'-Isopropylidenediphenol, oligomeric reaction product with 1-chloro-2,3-epoxypropane, Trichloro(N,N-dimethyl octylamine)boron
14.3	Class: 9 (environmentally hazardous)	
14.3		ADR/RID/ADN: 9
14.3		IMDG-Code: 9
14.3		ICAO-TI: 9
14.4	Packing group: III (substance presenting low danger)	Packing group
14.4		ADR/RID/ADN: III
14.4		IMDG-Code: III
14.4		ICAO-TI: III
14.5	Environmental hazards: hazardous to the aquatic environment: 4,4'-Isopropylide- nediphenol, oligomeric reaction products with 1-chloro- 2,3-epoxypropane	Environmental hazards: hazardous to the aquatic environment
14.5		Environmentally hazardous substance (aquatic environ ment): 4,4'-Isopropylidenediphenol, oligomeric reaction produc with 1-chloro-2,3-epoxypropane, Trichloro(N,N-dimethy octylamine)boron
14.7	UN number: 3082	
14.7	Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LI- QUID, N.O.S.	
14.7	Class: 9	
14.7	Packing group:	



Version number: 2.0 Replaces version of: 2016-03-17 (GHS 1)

Section	Former entry (text/value)	Actual entry (text/value)
14.7	Tunnel restriction code (TRC): E	Tunnel restriction code (TRC):
14.7	Emergency Action Code: 3Z	
14.7		Emergency Action Code: 3Z
14.7	UN number: 3082	
14.7	Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LI- QUID, N.O.S.	
14.7	Class: 9	
14.7	Packing group: III	
14.7	Marine pollutant: yes (hazardous to the aquatic environment)	Marine pollutant: yes (hazardous to the aquatic environment) (bispheno epichlorohydrine, epoxyresin (average molecularweigl 700))
14.7	UN number: 3082	
14.7	Proper shipping name: Environmentally hazardous substance, liquid, n.o.s.	
14.7	Class: 9	
14.7	Packing group:	
14.7	Special provisions (SP): A97, A158, A197, 274	Special provisions (SP): A97, A158, A197
15.1	Restrictions according to REACH, Annex XVII: None of the ingredients are listed.	Restrictions according to REACH, Annex XVII
15.1	Directive 2011/65/EU on the restriction of the use of cer- tain hazardous substances in electrical and electronic equipment (RoHS) - Annex II: None of the ingredients are listed.	
15.1	Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD): None of the ingredients are listed.	Water Framework Directive (WFD)
15.2	Chemical Safety Assessment: Chemical safety assessments for substances in this mix- ture were not carried out.	Chemical Safety Assessment: No Chemical Safety Assessment has been carried ou this mixture by the supplier.
16	Key literature references and sources for data: - Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU - Regulation (EC) No. 1272/2008 (CLP, EU GHS)	Key literature references and sources for data: Regulation (EC) No 1272/2008 on classification, label and packaging of substances and mixtures. Regulati (EC) No. 1907/2006 (REACH), amended by 2020/87 EU.Transport of dangerous goods by road, rail and i land waterway (ADR/RID/ADN). International Maritir Dangerous Goods Code (IMDG). Dangerous Goods F ulations (DGR) for the air transport (IATA).



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Section	Former entry (text/value)	Actual entry (text/value)
16	Disclaimer: Data is presented in good faith and is based on the present state of our knowledge. It is intended to describe the compound with regard to the appropriate safety pre- cautions. This information is not intended to be a product specification. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally ap- plicable. However, users should review these recommendations in the specific context of the intended use and determine whether they are appropriate.	Disclaimer: This information is based upon the present state of our knowledge. This SDS has been compiled and is solely in- tended for this product.

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
ADR/RID/ADN	European Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/Inland Waterways (ADR/RID/ADN)
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	= EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations



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Abbr.	Descriptions of used abbreviations
ΙΑΤΑ	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethal- ity during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a spe- cified time interval
LEL	Lower explosion limit (LEL)
LOEC	Lowest Observed Effect Concentration
log KOW	n-Octanol/water
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Repr.	Reproductive toxicity
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concern ing the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitisation
SVHC	Substance of Very High Concern
UEL	Upper explosion limit (UEL)
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture. Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).



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List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child (if swallowed).
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child (if swallowed).
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.