

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.09.2019

Version number 4

Revision: 18.09.2019

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

· 1.1 Product identifier

· Trade name: **TREMCO CS350 B**

· MSDS code: W-T-CS350B

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

No further relevant information available.

· Application of the substance / the mixture

Epoxy curing agent

Coating

Additional component

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

tremco illbruck Ltd

Coupland Road, Hindley Green, Wigan, WN2 4HT

Tel: +44 (0) 1942251400, Fax: +44 (0) 1942251410

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· Further information obtainable from:

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www.tremco-illbruck.co.uk, uk.info@tremco-illbruck.com

· 1.4 Emergency telephone number:

During office hours tel.: +44 (0) 1942251400. At all other times it is recommended to call NHS 111 (England/Wales/Scotland), 01 809 2166 (ROI), or otherwise to contact a doctor.

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

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

Acute Tox. 4 H302 Harmful if swallowed.

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

Repr. 2 H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

· 2.2 Label elements

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

The product is classified and labelled according to the CLP regulation.

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· Hazard pictograms

GHS05 GHS07 GHS08 GHS09

· Signal word Danger**· Contains:**

4-tert-butylphenol
 Benzyl alcohol
 nonylphenol
 trimethylhexane-1,6-diamine

· Hazard statements

H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
 H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P202 Do not handle until all safety precautions have been read and understood.
 P261 Avoid breathing vapours.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P311 IF exposed or concerned: Call a doctor.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

· 2.3 Other hazards**· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures**· Description:** Mixture of substances listed below with non-hazardous additions.**· Dangerous components:**

CAS: 98-54-4 EINECS: 202-679-0 Reg.nr.: 01-2119489419-21-xxxx	4-tert-butylphenol Repr. 2, H361f; Eye Dam. 1, H318; Skin Irrit. 2, H315	20-<30%
CAS: 100-51-6 EINECS: 202-859-9 Reg.nr.: 01-2119492630-38-xxxx	Benzyl alcohol Acute Tox. 4, H302; Acute Tox. 4, H332	20-<30%

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CAS: 25154-52-3 EINECS: 246-672-0	nonylphenol Repr. 2, H361fd; Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302	10-<20%
CAS: 25620-58-0 EINECS: 247-134-8 Reg.nr.: 01-2119560598-25-xxxx	trimethylhexane-1,6-diamine Skin Corr. 1B, H314; Aquatic Acute 1, H400	1-<5%

SVHC

CAS: 98-54-4	4-tert-butylphenol
CAS: 25154-52-3	nonylphenol

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Take affected persons out of danger area and lay down.

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

Seek immediate medical advice.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

· After eye contact:

Rinse opened eye for several minutes under running water.

Seek immediate medical advice.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

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

Causes severe skin burns and eye damage.

Breathing difficulty

Headache

Dizziness

Nausea

Irritating to respiratory system.

Harmful if inhaled.

Harmful if swallowed.

May cause an allergic skin reaction.

· **Information for doctor:** No further relevant information available.

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- **Hazards** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
Carbon monoxide (CO)
Carbon dioxide (CO₂)
Nitrogen oxides (NO_x)
Ammonia
- **5.3 Advice for firefighters**
- **Protective equipment:**
Mouth respiratory protective device.
Wear self-contained respiratory protective device.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
- **6.2 Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to Section 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Avoid contact with the eyes and skin.

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The usual precautionary measures are to be adhered to when handling chemicals.

Ensure that washing facilities are available at the work place.

Do not breathe vapour.

Do not eat, drink, smoke or sniff while working.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Store only in unopened original receptacles.

Store in a cool location.

Provide ventilation for receptacles.

· **Information about storage in one common storage facility:**

Do not store together with oxidising and acidic materials.

Store away from metals.

Protect from heat and direct sunlight.

· **Further information about storage conditions:**

Keep container tightly sealed.

Protect from frost.

Store in cool, dry conditions in well sealed receptacles.

Protect from humidity and water.

Store receptacle in a well ventilated area.

Storage temperature: +5°C to +25°C

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Ensure that washing facilities are available at the work place.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Pregnant women should strictly avoid inhalation or skin contact.

Do not eat, drink, smoke or sniff while working.

Use skin protection cream for skin protection.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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Ensure good ventilation/exhaustion at the workplace.

This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.



Self-contained respiratory protective device.

For further guidance, please refer to HSE HSG53 "Respiratory Protective Equipment at work - A Practical Guide".

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Material of gloves**

Nitrile rubber, NBR

Butyl rubber, BR

Neoprene gloves

PVC gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:**



Protective work clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Liquid

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· Colour:	Light yellow
· Odour:	Ammonia-like
· pH-value:	Alkaline
· Melting point/freezing point:	Undetermined.
· Initial boiling point and boiling range:	205.4 °C
· Flash point:	>100 °C
· Explosive properties:	Product does not present an explosion hazard.
· Vapour pressure at 20 °C:	10.34 mmHg
· Density at 20 °C:	0.99 g/cm ³
· Solubility in / Miscibility with water:	<0.1 g/l
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** Stable
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
Reacts with strong acids and oxidising agents.
Reacts with peroxides.
Reacts with certain metals.
- **10.4 Conditions to avoid**
Water / moisture.
Keep away from heat.
- **10.5 Incompatible materials:**
Nitrites
Reacts with peroxides.
Reacts with oxidising agents.
Reacts with acids.
- **10.6 Hazardous decomposition products:**
Nitrogen oxides
Carbon monoxide and carbon dioxide
Nitric acid (HNO₃)
Ammonia
Aldehyde
Nitrosamine
Hydrocarbons

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Harmful if swallowed.

LD/LC50 values relevant for classification:

CAS: 98-54-4 4-tert-butylphenol

Oral	LD50	2,951 mg/kg (rat)
Dermal	LD50	2,288 mg/kg (rabbit)

CAS: 100-51-6 Benzyl alcohol

Oral	LD50	1,230 mg/kg (rat) 1,360 mg/kg (mouse)
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CAS: 25154-52-3 nonylphenol

Oral	LD50	1,231 mg/kg (mouse) 580 mg/kg (rat)
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CAS: 25620-58-0 trimethylhexane-1,6-diamine

Oral	LD50	900 mg/kg (rat)
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Primary irritant effect:

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitisation May cause an allergic skin reaction.

Additional toxicological information:

Causes burns.

Corrosive to the respiratory tract.

Irritating to eyes, respiratory system and skin.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

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

Reproductive toxicity

Suspected of damaging fertility. Suspected of damaging the unborn child.

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

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

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

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential May be accumulated in organism

12.4 Mobility in soil No further relevant information available.

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- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
 Very toxic for aquatic organisms
 Do not allow product to reach ground water, water course or sewage system.
 Must not reach sewage water or drainage ditch undiluted or unneutralised.
 Danger to drinking water if even small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
 Must not be disposed together with household garbage. Do not allow product to reach sewage system.
 Disposal must be made according to official regulations.
 Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

- **European waste catalogue**

08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances
HP6	Acute Toxicity
HP8	Corrosive
HP10	Toxic for reproduction
HP14	Ecotoxic

- **Uncleaned packaging:**
- **Recommendation:**
 Dispose of packaging according to regulations on the disposal of packagings.
 Packagings that may not be cleansed are to be disposed of in the same manner as the product.
 Non contaminated packagings may be recycled.

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN2735
- **14.2 UN proper shipping name**
- **ADR** 2735 AMINES, LIQUID, CORROSIVE, N.O.S.
 (TRIMETHYLHEXAMETHYLENEDIAMINES),
 ENVIRONMENTALLY HAZARDOUS
 2735 AMINES, LIQUID, CORROSIVE, N.O.S.,

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·	(TRIMETHYLHEXAMETHYLENEDIAMINES), ENVIRONMENTALLY HAZARDOUS
· IMDG	AMINES, LIQUID, CORROSIVE, N.O.S. (TRIMETHYLHEXAMETHYLENEDIAMINES), MARINE POLLUTANT
· IATA	AMINES, LIQUID, CORROSIVE, N.O.S. (TRIMETHYLHEXAMETHYLENEDIAMINES)
· 14.3 Transport hazard class(es)	
· ADR	
 	
· Class	8 (C9) Corrosive substances.
· Label	8
· IMDG	
 	
· Class	8 Corrosive substances.
· Label	8
· IATA	
	
· Class	8 Corrosive substances.
· Label	8
· 14.4 Packing group	
· ADR, IMDG, IATA	II
· 14.5 Environmental hazards:	Product contains environmentally hazardous substances: nonylphenol
· Marine pollutant:	Yes
· Special marking (ADR):	Symbol (fish and tree) Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Corrosive substances.
· Danger code (Kemler):	80
· EMS Number:	F-A,S-B
· Segregation groups	Alkalis
· Stowage Category	A

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· Segregation Code	SG35 Stow "separated from" SGG1-acids
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (TRIMETHYLHEXAMETHYLENEDIAMINES), 8, II, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
 "CLP" Regulation (EC) No 1272/2008 (OJ L 353, 31.12.2008, p.1).
 "REACH" Regulation (EC) No 1907/2006 (OJ L 396, 30.12.2006, p.1, with subsequent amendments).
 COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.
 HSE EH40/2005 Workplace Exposure Limits (as amended)
 Guidance on the classification and assessment of waste | Technical Guidance WM3 (1st edition 2015)
 2001/118/EC as regards the list of wastes
 2008/98/EC on waste
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 46a

· **Regulation (EU) No 649/2012**

CAS: 25154-52-3 nonylphenol

Annex I Part 1
Annex I Part 2

· **National regulations:**

· **Information about limitation of use:**

Employment restrictions concerning juveniles must be observed.
 Employment restrictions concerning pregnant and lactating women must be observed.

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· **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**

CAS: 98-54-4	4-tert-butylphenol
CAS: 25154-52-3	nonylphenol

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H361f Suspected of damaging fertility.
- H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

· **Department issuing SDS:**

Prepared and verified in accordance with "REACH" Regulation (EC) No 1907/2006, Annex II, Part A, 0.2.3.

· **Abbreviations and acronyms:**

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- SVHC: Substances of Very High Concern
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 4: Acute toxicity – Category 4
- Skin Corr. 1B: Skin corrosion/irritation – Category 1B
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- Repr. 2: Reproductive toxicity – Category 2
- Repr. 2: Reproductive toxicity – Category 2
- Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
- Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
- Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

· *** Data compared to the previous version altered.**