

Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 09.02.2016

Version number 4

Revision: 09.02.2016

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

- **1.1 Product identifier**
- **Trade name: TREMCO ES100 A**
- **MSDS code: W-T-ES100A**
- **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 coating
- **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
msds@tremco-illbruck.com
- **Further information obtainable from:**
tremco illbruck Ltd
Coupland Road, Hindley Green, Wigan, WN2 4HT
T: +44 (0) 1942251400, F: +44 (0) 1942251410
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 please contact your national poisoning centre.

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
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.
- **Hazard pictograms**



GHS07 GHS09

- **Signal word** Warning
- **Contains:**
reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
Bisphenol F epoxy resin
oxirane, mono[(C12-14-alkyloxy)methyl] derivs
- **Hazard statements**
H315 Causes skin irritation.

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H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

- **Precautionary statements**

P280 Wear protective gloves / eye protection.

P273 Avoid release to the environment.

P264 Wash thoroughly after handling.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

- **Supplemental information:**

EUH205 Contains epoxy constituents. May produce an allergic reaction.

- **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: 25068-38-6 NLP: 500-033-5 Reg.nr.: 01-2119456619-26-xxxx	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700) Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	20- <30%
CAS: 9003-36-5 NLP: 500-006-8 Reg.nr.: 01-2119454392-40-xxxx	Bisphenol F epoxy resin Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1, H317	10- <20%
CAS: 68609-97-2 EINECS: 271-846-8 Reg.nr.: 01-2119485289-22-xxxx	oxirane, mono[(C12-14-alkyloxy)methyl] derivs Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	5- <10%
CAS: 872-50-4 EINECS: 212-828-1	N-methyl-2-pyrrolidone Repr. 1B, H360D; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	0.1- <1%

- **SVHC**

872-50-4 | N-methyl-2-pyrrolidone

- **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:** Take affected persons out of danger area and lay down.

- **After inhalation:**

Supply fresh air and to be sure call for a doctor.

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

- **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

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- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** Allergic reactions
- **Information for doctor:** No further relevant information available.
- **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
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **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**
The usual precautionary measures are to be adhered to when handling chemicals.
Avoid contact with the eyes and skin.
When the product is mixed, it is recommended to be used within 20 - 30 minutes.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store only in unopened original receptacles.
- **Information about storage in one common storage facility:**
Protect from heat and direct sunlight.

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Store away from foodstuffs.

- **Further information about storage conditions:**

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in a well ventilated area.

- **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:**

872-50-4 N-methyl-2-pyrrolidone

WEL	Short-term value: 80 mg/m ³ , 20 ppm
	Long-term value: 40 mg/m ³ , 10 ppm
	Sk

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

- **8.2 Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

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.

- **Respiratory protection:** Not necessary if room is well-ventilated.

- **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

PVC or PE 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

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SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Pasty

Colour: Dark grey

· Odour: Characteristic

· Boiling point/Boiling range: > 100 °C

· Flash point: > 200 °C

· Danger of explosion: Product does not present an explosion hazard.

· Density at 20 °C: 1.8 g/cm³

· Solubility in / Miscibility with water:

Not miscible or difficult to mix.

· Solvent content:

Organic solvents: 0.5 %

· 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

Forms heat.

Exothermic reaction.

Reacts with acids, alkalis and oxidising agents.

· 10.4 Conditions to avoid No further relevant information available.

· 10.5 Incompatible materials: No further relevant information available.

· 10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

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

· LD/LC50 values relevant for classification:

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Oral LD50 11400 mg/kg (rat)

Dermal LD50 > 2000 mg/kg (rabbit)

· Primary irritant effect:

· Skin corrosion/irritation

Causes skin irritation.

· Serious eye damage/irritation

Causes serious eye irritation.

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- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **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** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** The product is not easily, but potentially biodegradable.
- **12.3 Bioaccumulative potential** May be accumulated in organism
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
- **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.
Cured product can be deposited together with domestic waste. Observe the specific related regulations of local authorities.
- **Waste disposal key:** UK (WM3) : HP4 HP13 HP14

· European waste catalogue

08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances
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- **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.

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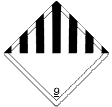



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Non contaminated packagings may be recycled.

SECTION 14: Transport information

<ul style="list-style-type: none"> · 14.1 UN-Number · ADR, IMDG, IATA 	UN3082
<ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR · IMDG · IATA 	<p>3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A epoxy resin (number average MW \leq700), Bisphenol F epoxy resin)</p> <p>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A epoxy resin (number average MW \leq700), Bisphenol F epoxy resin), MARINE POLLUTANT</p> <p>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A epoxy resin (number average MW \leq700), Bisphenol F epoxy resin)</p>
<ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR 	<div style="display: flex; align-items: center; gap: 10px;">   </div> <p>9 (M6) Miscellaneous dangerous substances and articles.</p> <p>9</p>
<ul style="list-style-type: none"> · IMDG, IATA 	<div style="display: flex; align-items: center; gap: 10px;">   </div> <p>9 Miscellaneous dangerous substances and articles.</p> <p>9</p>
<ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA 	III
<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): 	<p>Product contains environmentally hazardous substances: bisphenol A epoxy resin (number average MW \leq700)</p> <p>Yes</p> <p>Symbol (fish and tree)</p> <p>Symbol (fish and tree)</p>

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· Special marking (IATA):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
· Danger code (Kemler):	90
· EMS Number:	F-A,S-F
· Stowage Category	A
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A EPOXY RESIN (NUMBER AVERAGE MW \leq 700), BISPHENOL F EPOXY RESIN), 9, III

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).

"CHIP" SI 2009 No.716.

"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

· National regulations:

· Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

· Other regulations, limitations and prohibitive regulations

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

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· **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**

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H360D May damage the unborn child.
- H411 Toxic to aquatic life with long lasting effects.

· **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
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
- Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
- Repr. 1B: Reproductive toxicity, Hazard Category 1B
- STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
- Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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