

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 08.08.2014

Version number 2

Revision: 08.08.2014

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

- **1.1 Product identifier**

- Trade name: **TREMCO ES400 A**

- **MSDS code:** W-T-ES400A

- **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**

Primer / Subcoating

Epoxy sealing

- **1.3 Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

tremco illbruck Coatings 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**

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

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.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Xi; Irritant

R36/38: Irritating to eyes and skin.

Xi; Sensitising

R43: May cause sensitisation by skin contact.

N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

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- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **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
 glycidylether of C12-C14 alcohols

- **Hazard statements**

H315 Causes skin irritation.
 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:**

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:**

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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) Xi R36/38; Xi R43; N R51/53 ----- Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	50- <75%
CAS: 9003-36-5 NLP: 500-006-8	Bisphenol F epoxy resin Xi R36/38; Xi R43; N R51/53 ----- Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	20- <30%
CAS: 68609-97-2 EINECS: 271-846-8 Reg.nr.: 01-2119485289-22-xxxx	glycidylether of C12-C14 alcohols Xi R38; Xi R43 ----- Skin Irrit. 2, H315; Skin Sens. 1, H317	10- <20%

· **Additional information:** For the wording of the listed risk 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.

· **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

Irritating to eyes and skin.

· **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.

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- **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 clothing.

Ensure adequate ventilation

- **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:**

Ensure adequate ventilation.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

- **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.

- **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.

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.

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:**

Keep away from foodstuffs, beverages and feed.

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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

SECTION 9: Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form: Liquid

Colour: Colourless

· **Odour:** Mild

· **Boiling point/Boiling range:** > 100 °C

· **Flash point:** 130 °C

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

· **Density at 20 °C:** 1.13 g/cm³

· **Solubility in / Miscibility with water:** Insoluble.

· **Viscosity:**

Dynamic at 20 °C: 650 - 750 mPas

· **9.2 Other information** No further relevant information available.

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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 acids, alkalis and oxidizing 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:**

- **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:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Causes serious eye irritation.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

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.
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.

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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 : H4 H14

- **European waste catalogue**

08 04 09*	waste adhesives and sealants containing organic solvents or other dangerous 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.

Non contaminated packagings may be recycled.

SECTION 14: Transport information

- **14.1 UN-Number**

- **ADR, IMDG, IATA**

UN3082

- **14.2 UN proper shipping name**

- **ADR**

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A epoxy resin (number average MW \leq 700), Bisphenol F epoxy resin)

- **IMDG**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A epoxy resin (number average MW \leq 700), Bisphenol F epoxy resin), MARINE POLLUTANT

- **IATA**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A epoxy resin (number average MW \leq 700), Bisphenol F epoxy resin)

- **14.3 Transport hazard class(es)**

- **ADR**



- **Class**

9 (M6) Miscellaneous dangerous substances and articles.

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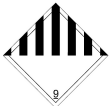

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· Label	9
· IMDG, IATA	
 	
· Class	9 Miscellaneous dangerous substances and articles.
· Label	9
· 14.4 Packing group	
· ADR, IMDG, IATA	III
· 14.5 Environmental hazards:	Product contains environmentally hazardous substances: bisphenol A epoxy resin (number average MW ≤ 700), Bisphenol F epoxy resin
· Marine pollutant:	Yes
· Special marking (ADR):	Symbol (fish and tree)
· 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
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 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":	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A epoxy resin (number average MW ≤ 700), Bisphenol F epoxy resin), 9, III

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SECTION 15: Regulatory information

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

Directive 1999/45/EC.

"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).

· 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** Not applicable.

· **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.

H411 Toxic to aquatic life with long lasting effects.

R36/38 Irritating to eyes and skin.

R38 Irritating to skin.

R43 May cause sensitisation by skin contact.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· 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 Harmonized 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

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

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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