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

1.1 Product identifier

- **Trade name:** TREMCO SF404 A
- **MSDS code:** W-T-SF404A

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 resin adhesive
- Fire retarding agent

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**
  - 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

- **Hazard pictograms**
  - GHS07
  - GHS09

- **Signal word** Warning

- **Contains:**
  - epoxy resin (number average MW <700)
  - polypropylene glycol diglycidyl ether

(Contd. on page 2)
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 01.07.2015
Revision: 01.07.2015
Version number 6

Trade name: TREMCO SF404 A

(Contd. of page 1)

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.
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+P313 IF exposed or concerned: Get medical advice/attention.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.

Supplemental information:
EUH205 Contains epoxy constituents. May produce an allergic reaction.

3.2 Mixtures
Description: Mixture of substances listed below with non-hazardous additions.

Dangerous components:

<table>
<thead>
<tr>
<th>CAS:</th>
<th>Substance</th>
<th>Percentage</th>
<th>PBT</th>
<th>vPvB</th>
</tr>
</thead>
<tbody>
<tr>
<td>40216-08-8</td>
<td>epoxy resin (number average MW &lt;700) Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317</td>
<td>30-&lt;50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9072-62-2</td>
<td>polypropylene glycol diglycidyl ether Skin Sens. 1, H317</td>
<td>1-&lt;5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27138-31-4</td>
<td>dipropylene glycol dibenzoate Aquatic Chronic 3, H412</td>
<td>1-&lt;5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>872-50-4</td>
<td>N-methyl-2-pyrrolidone Repr. 1B, H360D; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335</td>
<td>0.1-&lt;1%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

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.

(Contd. on page 3)
· **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:**
  Use fire extinguishing methods suitable to surrounding conditions.
  CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **5.2 Special hazards arising from the substance or mixture**
  Formation of toxic gases is possible during heating or in case of fire.

- **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:** 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).
  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.
  Use only in well ventilated areas.

- **Information about fire - and explosion protection:** The product is not flammable.

- **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:**
    Store away from foodstuffs.
    Protect from heat and direct sunlight.

(Contd. on page 4)
SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>872-50-4 N-methyl-2-pyrrolidone</th>
<th>WEL</th>
<th>Short-term value: 80 mg/m³, 20 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sk</td>
<td>Long-term value: 40 mg/m³, 10 ppm</td>
</tr>
</tbody>
</table>

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.
Pregnant women should strictly avoid inhalation or skin contact.

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
**SECTION 9: Physical and chemical properties**

<table>
<thead>
<tr>
<th>9.1 Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Information</strong></td>
</tr>
<tr>
<td><strong>Appearance:</strong></td>
</tr>
<tr>
<td>Form: Pasty</td>
</tr>
<tr>
<td>Colour: Beige</td>
</tr>
<tr>
<td>Odour: Characteristic</td>
</tr>
<tr>
<td>Boiling point/Boiling range: &gt; 200 °C</td>
</tr>
<tr>
<td>Flash point: &gt; 100 °C</td>
</tr>
<tr>
<td>Danger of explosion: Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Density at 20 °C: 1.63 g/cm³</td>
</tr>
<tr>
<td>Solubility in water: Insoluble.</td>
</tr>
<tr>
<td>Viscosity: Dynamic at 20 °C: 8000 mPas</td>
</tr>
<tr>
<td>Solvent content: VOC (EC): GEV-EMICODE EC1</td>
</tr>
<tr>
<td>9.2 Other information No further relevant information available.</td>
</tr>
</tbody>
</table>

**SECTION 10: Stability and reactivity**

<table>
<thead>
<tr>
<th>10.1 Reactivity Stable</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.2 Chemical stability</td>
</tr>
<tr>
<td>Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.</td>
</tr>
<tr>
<td>10.3 Possibility of hazardous reactions Reacts with acids, alkalis and oxidising agents.</td>
</tr>
<tr>
<td>10.4 Conditions to avoid No further relevant information available.</td>
</tr>
<tr>
<td>10.5 Incompatible materials: No further relevant information available.</td>
</tr>
<tr>
<td>10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide</td>
</tr>
</tbody>
</table>

**SECTION 11: Toxicological information**

<table>
<thead>
<tr>
<th>11.1 Information on toxicological effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
</tr>
<tr>
<td>Primary irritant effect:</td>
</tr>
<tr>
<td>Skin corrosion/irritation Causes skin irritation.</td>
</tr>
<tr>
<td>Serious eye damage/irritation Causes serious eye irritation.</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)</td>
</tr>
<tr>
<td>Germ cell mutagenicity Based on available data, the classification criteria are not met.</td>
</tr>
</tbody>
</table>
· 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:
· 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.

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 : HP4 HP13 HP14
· European waste catalogue
08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances
· 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/F epoxy resins, MW <700)

**IMDG**
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A/F epoxy resins, MW <700, oxydipropyl dibenzoate), MARINE POLLUTANT

**IATA**
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A/F epoxy resins, MW <700)

### 14.3 Transport hazard class(es)

**ADR**

- **Class**: 9 (M6) Miscellaneous dangerous substances and articles.
- **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: epoxy resin (number average MW <700)

- **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 Marpol and the IBC Code

Not applicable.
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 01.07.2015  Revision: 01.07.2015
Version number 6

Trade name: TREMCO SF404 A

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. (epoxy resin (number average MW <700)), 9, III

SECTION 15: Regulatory information
- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  "CHIP“ SI 2009 No.716.
  COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010
  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
  872-50-4 | N-methyl-2-pyrrolidone

- 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.

(Contd. on page 9)
**Safety data sheet**

according to 1907/2006/EC, Article 31

Printing date 01.07.2015
Version number 6
Revision: 01.07.2015

**Trade name:** TREMCO SF404 A

| 41.1.0 | **H360D** May damage the unborn child. |
| 41.1.0 | **H411** Toxic to aquatic life with long lasting effects. |
| 41.1.0 | **H412** Harmful 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)
VOC: Volatile Organic Compounds (USA, EU)
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
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

* Data compared to the previous version altered.