SAFETY DATA SHEET
WEAR GUARD (HIGH TEMP 450) RESIN

<table>
<thead>
<tr>
<th>SECTION 1: Identification of the substance/mixture and of the company/undertaking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1. Product identifier</strong></td>
</tr>
<tr>
<td>Product name</td>
</tr>
<tr>
<td>Product number</td>
</tr>
<tr>
<td><strong>1.2. Relevant identified uses of the substance or mixture and uses advised against</strong></td>
</tr>
<tr>
<td>Identified uses</td>
</tr>
<tr>
<td><strong>1.3. Details of the supplier of the safety data sheet</strong></td>
</tr>
<tr>
<td>Supplier</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>1.4. Emergency telephone number</strong></td>
</tr>
<tr>
<td>Emergency telephone</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION 2: Hazards identification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.1. Classification of the substance or mixture</strong></td>
</tr>
<tr>
<td>Classification (EC 1272/2008)</td>
</tr>
<tr>
<td>Physical hazards</td>
</tr>
<tr>
<td>Health hazards</td>
</tr>
<tr>
<td>Environmental hazards</td>
</tr>
<tr>
<td><strong>2.2. Label elements</strong></td>
</tr>
<tr>
<td>Pictogram</td>
</tr>
<tr>
<td>Signal word</td>
</tr>
</tbody>
</table>
WEAR GUARD (HIGH TEMP 450) RESIN

Hazard statements
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.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.

Precautionary statements
P261 Avoid breathing vapour/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

Contains
EPOXY RESIN (Number average MW <= 700 )

Supplementary precautionary statements
P264 Wash contaminated skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P312 Call a POISON CENTER/ doctor if you feel unwell.
P313 Specific treatment (see medical advice on this label).
P321 If skin irritation occurs: Get medical advice/ attention.
P332+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards
This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>EPOXY RESIN (Number average MW &lt;= 700 )</th>
<th>30-60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 25068-38-6</td>
<td></td>
</tr>
<tr>
<td>EC number: 500-033-5</td>
<td></td>
</tr>
<tr>
<td>REACH registration number: 01-2119456619-26-0000</td>
<td></td>
</tr>
</tbody>
</table>

Classification
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Skin Sens. 1 - H317
Aquatic Chronic 2 - H411
WEAR GUARD (HIGH TEMP 450) RESIN

<table>
<thead>
<tr>
<th>TITANIUM DIOXIDE</th>
<th>&lt;1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 13463-67-7</td>
<td>EC number: 236-675-5</td>
</tr>
</tbody>
</table>

Classification
Not Classified

<table>
<thead>
<tr>
<th>CARBON BLACK</th>
<th>&lt;1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 1333-86-4</td>
<td></td>
</tr>
</tbody>
</table>

Classification
Not Classified

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
Avoid contact with skin and eyes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Inhalation
Move affected person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion
Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention immediately.

Skin contact
Remove affected person from source of contamination. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.

Eye contact
Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

General information
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor
No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Extinguish with foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture

Specific hazards
Irritating gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting
Avoid breathing fire gases or vapours. Keep up-wind to avoid fumes. Do not use water jet as an extinguisher, as this will spread the fire. Control run-off water by containing and keeping it out of sewers and watercourses. Use water to keep fire exposed containers cool and disperse vapours.

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
WEAR GUARD (HIGH TEMP 450) RESIN

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions
Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions
Avoid the spillage or runoff entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up
Absorb spillage with sand or other inert absorbent. Transfer to covered steel drums for disposal. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections

Reference to other sections
Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions
Use only in well-ventilated areas. Keep away from heat, sparks and open flame. Open drum carefully as content may be under pressure. Do not eat, drink or smoke when using the product. Good personal hygiene procedures should be implemented.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions
Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10).

7.3. Specific end use(s)

Specific end use(s)
The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

TITANIUM DIOXIDE
Long-term exposure limit (8-hour TWA): 10 mg/m³ total dust

CARBON BLACK
Long-term exposure limit (8-hour TWA): 3.5 mg/m³

Ingredient comments
No exposure limits known for ingredient(s).

EPOXY RESIN (Number average MW <= 700) (CAS: 25068-38-6)

DNEL
Workers - Dermal; Short term systemic effects: 8.33 mg/kg/day
Workers - Inhalation; Short term systemic effects: 12.25 mg/m³

8.2. Exposure controls

Protective equipment

[Icons of protective equipment]
WEAR GUARD (HIGH TEMP 450) RESIN

Appropriate engineering controls
Provide adequate general and local exhaust ventilation.

Eye/face protection
Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection
Wear protective gloves made of the following material: Rubber or plastic. To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 8 hours.

Other skin and body protection
Wear apron or protective clothing in case of contact.

Hygiene measures
Provide eyewash station and safety shower. Keep away from food, drink and animal feeding stuffs. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using the product. Change work clothing daily before leaving workplace.

Respiratory protection
If ventilation is inadequate, suitable respiratory protection must be worn. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. Check that the respirator fits tightly and the filter is changed regularly. Wear a respirator fitted with the following cartridge: Gas filter, type A2. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Viscous liquid.</td>
</tr>
<tr>
<td>Odour</td>
<td>Slight.</td>
</tr>
<tr>
<td>pH</td>
<td>pH (concentrated solution): 7.0 @ 20 °C</td>
</tr>
<tr>
<td>Melting point</td>
<td>n/d°C</td>
</tr>
<tr>
<td>Initial boiling point and range</td>
<td>&gt;260°C @</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 204°C PMCC (Pensky-Martens closed cup).</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>&lt;0.03mmHg @ °C</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.1 - 1.3 @ 20 °C</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Slightly soluble in water.</td>
</tr>
</tbody>
</table>

9.2. Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volatile organic compound</td>
<td>This product contains a maximum VOC content of 0.</td>
</tr>
</tbody>
</table>

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity

10.2. Chemical stability

Stability
Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions
WEAR GUARD (HIGH TEMP 450) RESIN

Possibility of hazardous reactions

Not available.

10.4. Conditions to avoid

Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid

Avoid contact with the following materials: Strong oxidising agents. Strong acids. Amines.

10.6. Hazardous decomposition products

Hazardous decomposition products


SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - inhalation

ATE inhalation (gases ppm) 4,500.0
ATE inhalation (vapours mg/l) 11.0
ATE inhalation (dusts/mists mg/l) 1.5

Inhalation

Unlikely to be hazardous by inhalation because of the low vapour pressure of the product at ambient temperature. Spray/mists may cause respiratory tract irritation.

Ingestion

Irritating. Symptoms following overexposure may include the following: Nausea, vomiting. Stomach pain.

Skin contact

Irritating to skin. May cause sensitisation by skin contact. May cause sensitisation or allergic reactions in sensitive individuals.

Eye contact

Irritating to eyes.

Acute and chronic health hazards

The product contains an epoxy resin. May cause sensitisation or allergic reactions in sensitive individuals.

Route of entry

Skin and/or eye contact

SECTION 12: Ecological Information

Ecotoxicity

Avoid release to the environment. The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

Toxicity

Very toxic to aquatic organisms.

EPOXY RESIN (Number average MW <= 700 )

Acute toxicity - fish LC₅₀, 96 hour: 2 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hour: 1.8 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hour: 11 mg/l, Selenastrom capricornutum
WEAR GUARD (HIGH TEMP 450) RESIN

Acute toxicity - microorganisms
IC₅₀, 18 hour: >42.6 mg/l, Activated sludge

Chronic toxicity - aquatic invertebrates
NOEC, 21 day: 0.3 mg/l, Daphnia magna

12.2. Persistence and degradability
Persistence and degradability
There are no data on the degradability of this product.

EPOXY RESIN (Number average MW <= 700)

Persistence and degradability
The product is not readily biodegradable.

Biodegradation
Water - Degradation 12%: 28 day

12.3. Bioaccumulative potential
Bioaccumulative potential
No data available on bioaccumulation.

EPOXY RESIN (Number average MW <= 700)

Bioaccumulative potential
BCF: 100 - 3000,

Partition coefficient
log Pow: 3.242

12.4. Mobility In soil
Mobility
Do not discharge into drains or watercourses or onto the ground.

EPOXY RESIN (Number average MW <= 700)

Mobility
Not considered mobile.

Adsorption/desorption coefficient
Supplier's information. Water - Koc: 1800 - 4400 @ °C

Henry's law constant
4.93E-05 Pa m³/mol @ 25°C

12.5. Results of PBT and vPvB assessment
Results of PBT and vPvB assessment
This product does not contain any substances classified as PBT or vPvB.

EPOXY RESIN (Number average MW <= 700)

Results of PBT and vPvB assessment
This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects
Other adverse effects
Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
General information
When handling waste, the safety precautions applying to handling of the product should be considered.
WEAR GUARD (HIGH TEMP 450) RESIN

Disposal methods
Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Waste class
08 04 99

SECTION 14: Transport information

General
No other information known.

14.1. UN number
UN No. (ADR/RID) 3082
UN No. (IMDG) 3082
UN No. (ICAO) 3082

14.2. UN proper shipping name
Proper shipping name (ADR/RID) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700 ))
Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700 ))
Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700 ))
Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700 ))

14.3. Transport hazard class(es)
ADR/RID class 9
ADR/RID label 9
IMDG class 9
ICAO class/division 9

Transport labels

14.4. Packing group
ADR/RID packing group III
IMDG packing group III
ICAO packing group III

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant

14.6. Special precautions for user
EmS F-A, S-F
Emergency Action Code •3Z
WEAR GUARD (HIGH TEMP 450) RESIN

Hazard Identification Number (ADR/RID) 90
Tunnel restriction code (E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No information required.

SECTION 15: Regulatory information

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

15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

SECTION 16: Other information

General information Only trained personnel should use this material.
Revision date 04/04/2018
Revision 6
Supersedes date 28/04/2016
Hazard statements in full H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.