1. Identification

Product identifier

Product name WEAR GUARD (HIGH TEMP 450) RESIN

Product number 11480

Recommended use of the chemical and restrictions on use

Application Resin.

Details of the supplier of the safety data sheet

Supplier ITW Performance Polymers
Bay 150
Shannon Industrial Estate
Co. Clare
Ireland
V14 DF82
353(61)771500
353(61)471285
mail@itwp.com

Emergency telephone number

Emergency telephone +44(0)1235 239 670 (24h)

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 STOT SE 3 - H335

Environmental hazards Aquatic Chronic 2 - H411

Label elements

Pictogram

![Signal word Warning](image)

Hazard statements H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
WEAR GUARD (HIGH TEMP 450) RESIN

Precautionary statements

P261 Avoid breathing vapor/spray.
P264 Wash contaminated skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing must not be allowed out of the workplace.
P273 Avoid release to the environment.
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.
P312 Call a poison center/doctor if you feel unwell.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
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.

Contains

EPOXY RESIN (Number average MW <= 700)

Other hazards

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

3. Composition/information on ingredients

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>
</tbody>
</table>

Classification

Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Skin Sens. 1 - H317
Aquatic Chronic 2 - H411

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

4. First-aid measures

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.

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.
WEAR GUARD (HIGH TEMP 450) RESIN

Indication of immediate medical attention and special treatment needed

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

5. Fire-fighting measures

Extinguishing media

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

Special hazards arising from the substance or mixture

Specific hazards Irritating gases or vapors.

Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapors. 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 vapors.

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures

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.

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.

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 labeled with correct contents and hazard symbol.

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

7. Handling and storage

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.

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).

Specific end uses(s)
The identified uses for this product are detailed in Section 1.

8. Exposure Controls/personal protection

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

Exposure controls
WEAR GUARD (HIGH TEMP 450) RESIN

Protective equipment

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 OSHA 1910.133.

Hand protection

Wear protective gloves made of the following material: Rubber or plastic. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. 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 OSHA 1910.134.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

**Appearance**

Viscous liquid.

**Odor**

Slight.

**pH**

pH (concentrated solution): 7.0 @ 20 ºC

**Melting point**

n/d°C

**Initial boiling point and range**

>260°C @

**Flash point**

> 204°C PMCC (Pensky-Martens closed cup).

**Vapor pressure**

<0.03mmHg @ ºC

**Relative density**

1.1 - 1.3 @ 20 ºC°C

**Solubility(ies)**

Slightly soluble in water.

**Volatile organic compound**

This product contains a maximum VOC content of 0.

10. Stability and reactivity

**Reactivity**


**Stability**

Stable at normal ambient temperatures and when used as recommended.
WEAR GUARD (HIGH TEMP 450) RESIN

Possibility of hazardous reactions
Not available.

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

Materials to avoid
Avoid contact with the following materials: Strong oxidizing agents. Strong acids. Amines.

Hazardous decomposition products

11. Toxicological information

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 vapor 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 sensitization or allergic reactions in sensitive individuals.

Eye contact
Irritating to eyes.

Acute and chronic health hazards
The product contains an epoxy resin. May cause sensitization or allergic reactions in sensitive individuals.

Route of entry
Skin and/or eye contact

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.

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, Selenastrum capricornutum

Acute toxicity - microorganisms
IC₅₀, 18 hour: >42.6 mg/l, Activated sludge
WEAR GUARD (HIGH TEMP 450) RESIN

Chronic toxicity - aquatic invertebrates

NOEC, 21 day: 0.3 mg/l, Daphnia magna

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

Bioaccumulative potential

Bio-Accumulative Potential

No data available on bioaccumulation.

EPOXY RESIN (Number average MW <= 700 )

Bio-Accumulative Potential

BCF: 100 - 3000.

Partition coefficient

log Pow: 3.242

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

Other adverse effects

Not available.

13. Disposal considerations

Waste treatment methods

General information

When handling waste, the safety precautions applying to handling of the product should be considered.

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

14. Transport information

General

No other information known.

UN Number

UN No. (TDG) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082
WEAR GUARD (HIGH TEMP 450) RESIN

UN No. (DOT) 3082

UN proper shipping name

Proper shipping name (TDG) 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 (DOT) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700 ))

Transport hazard class(es)

TDG class 9
TDG label(s) 9
IMDG Class 9
ICAO class/division 9

Transport labels

Packing group

TDG Packing Group III
IMDG packing group III
ICAO packing group III
DOT packing group III

Environmental hazards

Environmentally Hazardous Substance

Special precautions for user

EmS F-A, S-F

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

15. Regulatory information

16. Other information

General information Only trained personnel should use this material.

Revision date 4/4/2018
WEAR GUARD (HIGH TEMP 450) RESIN

Revision 6
Supersedes date 4/28/2016
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.