



SAFETY DATA SHEET WEAR GUARD (HIGH TEMP 450) HARDENER

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name WEAR GUARD (HIGH TEMP 450) HARDENER
Product No. 11480

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Hardener.

1.3. Details of the supplier of the safety data sheet

Supplier ITW DEVCON
BAY 150
SHANNON INDUSTRIAL ESTATE
SHANNON
CO CLARE
IRELAND
T: +353 (0)61471299
F: 353(0)61471285
info@itwippe.eu

1.4. Emergency telephone number

+44 (0) 1235 239670

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xn;R21/22. C;R34. R43. R52/53.

Environment

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

2.2. Label elements

Contains ISOPHORONEDIAMINE

Labelling



Corrosive



Harmful

Risk Phrases

R21/22
R34
R43
R52/53

Harmful in contact with skin and if swallowed.

Causes burns.

May cause sensitisation by skin contact.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases

S25
S26

S36/37/39
S45

S60

Avoid contact with eyes.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing, gloves and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

This material and its container must be disposed of as hazardous waste.

WEAR GUARD (HIGH TEMP 450) HARDENER

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

| | |
|--|--|
| ETHANOL | 1-5% |
| CAS-No.: 64-17-5 | EC No.: 200-578-6 |
| Classification (EC 1272/2008) Flam. Liq. 2 - H225 | Classification (67/548/EEC) F;R11 |
| ISOPHORONEDIAMINE | 60-100% |
| CAS-No.: 2855-13-2 | EC No.: 220-666-8 |
| Classification (EC 1272/2008) Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412 | Classification (67/548/EEC) C;R34 Xn;R21/22 R43 R52/53 |

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Do not breathe vapour/spray. Avoid contact with skin and eyes. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

Inhalation

Move the exposed person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Contact physician if discomfort continues.

Ingestion

Do not induce vomiting. Drink a few glasses of water or milk. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention immediately!

Skin contact

Remove affected person from source of contamination. Wash skin thoroughly with soap and water for several minutes. Contact physician if irritation persists.

Eye contact

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention. Contact physician if irritation persists.

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

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with foam, carbon dioxide or dry powder. Water.

5.2. Special hazards arising from the substance or mixture

WEAR GUARD (HIGH TEMP 450) HARDENER

Specific hazards

Avoid breathing fire vapours.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Keep up-wind to avoid fumes. Keep run-off water out of sewers and water sources. Dike for water control. Use water to keep fire exposed containers cool and disperse vapours. Warn everybody of potential hazards and evacuate if necessary.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Eliminate all sources of ignition.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Absorb spillage with non-combustible, absorbent material. Transfer to a container for disposal. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. 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

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Avoid contact with skin and eyes. Contaminated clothing and shoes must be discarded. Do not eat, drink or smoke when using the product. Observe good chemical hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place.

7.3. 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

| Name | STD | TWA - 8 Hrs | | STEL - 15 Min | | Notes |
|---------|-----|-------------|------------------------|---------------|--|-------|
| ETHANOL | WEL | 1000 ppm | 1920 mg/m ³ | | | |

WEL = Workplace Exposure Limit.

Ingredient Comments

WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment



Process conditions

Provide eyewash, quick drench.

Engineering measures

Provide adequate general and local exhaust ventilation.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

WEAR GUARD (HIGH TEMP 450) HARDENER

Hand protection

Use protective gloves. Rubber gloves are recommended. Butyl rubber gloves are recommended. PVC gloves are recommended. Neoprene gloves are recommended.

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Hygiene measures

Keep away from food, drink and animal feeding stuffs. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product. Change work clothing daily before leaving work place.

Skin protection

Wear apron or protective clothing in case of contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| | |
|---|----------------------------|
| Appearance | Liquid |
| Colour | Black. |
| Odour | Amine. |
| Solubility | Slightly soluble in water. |
| Initial boiling point and boiling range | 249 |
| Melting point (°C) | N/D |
| Relative density | 0.92 20 °C |
| Vapour density (air=1) | >1 |
| Evaporation rate | <1 (butyl acetate =1) |
| pH-Value, Diluted Solution | 11.5 5% |
| Flash point (°C) | 110 TOC (Tag open cup). |
| Flammability Limit - Lower(%) | N/D |
| Flammability Limit - Upper(%) | N/D |

9.2. Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Acids. Strong oxidising substances.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

Will not polymerise.

10.4. 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 acids and oxidising substances.

10.6. Hazardous decomposition products

Fire or high temperatures create: Nitrous gases (NO_x). Oxides of: Carbon monoxide (CO). Carbon dioxide (CO₂). Vapours/gases/fumes of: Ammonia or amines.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation

High concentrations may cause severe lung damage. When working extensively on big surfaces in small and badly ventilated rooms, vapours may develop in concentrations which may cause malaise such as headache, dizziness and nausea. Delayed, often serious breathing problems.

WEAR GUARD (HIGH TEMP 450) HARDENER

Ingestion

Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract. Risk of chemical pneumonia after aspiration.

Skin contact

Causes burns. Corrosive. Prolonged contact causes serious tissue damage. May cause sensitisation by skin contact.

Eye contact

Risk of serious damage to eyes. Causes burns. Irritation, burning, lachrymation, blurred vision after liquid splash.

Health Warnings

This substance is corrosive. This chemical may cause skin/eye irritation and burns (corrosive).

Route of entry

Inhalation. Skin absorption. Ingestion. Skin and/or eye contact.

| | |
|----------------------|--------------------------|
| Name | ETHANOL |
| Toxic Dose 1 - LD 50 | 7060 mg/kg (oral rat) |
| Toxic Dose 2 - LD 50 | 20,000 mg/kg (oral-rbt) |
| Toxic Conc. - LC 50 | 31,600 ppm/4h (inh-rat) |
| Name | ISOPHORONEDIAMINE |
| Toxic Dose 1 - LD 50 | 1030 mg/kg (oral rat) |

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

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

12.1. Toxicity

Acute Fish Toxicity

Not considered toxic to fish.

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

Do not discharge into drains, water courses or onto the ground.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

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

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

Waste Class

08 04 99

SECTION 14: TRANSPORT INFORMATION

General

No other information noted.

14.1. UN number

UN No. (ADR/RID/ADN) 2289

UN No. (IMDG) 2289

UN No. (ICAO) 2289

WEAR GUARD (HIGH TEMP 450) HARDENER

14.2. UN proper shipping name

Proper Shipping Name ISOPHORONEDIAMINE

14.3. Transport hazard class(es)

ADR/RID/ADN Class 8
ADR/RID/ADN Class Class 8: Corrosive substances.
ADR Label No. 8
IMDG Class 8
ICAO Class/Division 8
Transport Labels



14.4. Packing group

ADR/RID/ADN Packing group III
IMDG Packing group III
ICAO Packing group III

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

EMS F-A, S-B
Emergency Action Code 2X
Hazard No. (ADR) 80
Tunnel Restriction Code (E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 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

Uk Regulatory References

Chemicals (Hazard Information & Packaging) Regulations.

EU Legislation

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

Water hazard classification

WGK 3

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 29/08/2011

Revision 2

Supersedes date 15/11/2006

Date 29/08/2011

WEAR GUARD (HIGH TEMP 450) HARDENER

Risk Phrases In Full

| | |
|--------|---|
| R34 | Causes burns. |
| R21/22 | Harmful in contact with skin and if swallowed. |
| R52/53 | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R11 | Highly flammable |
| R43 | May cause sensitisation by skin contact. |

Hazard Statements In Full

| | |
|------|--|
| H225 | Highly flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H412 | Harmful to aquatic life with long lasting effects. |

Disclaimer

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.