SAFETY DATA SHEET
WEARGUARD HIGH LOAD HARDENER

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

1.1. Product identifier

Product name WEARGUARD HIGH LOAD HARDENER

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

1.4. Emergency telephone number

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

2.2. Label elements

Pictogram

Signal word Danger

Hazard statements
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

WEARGUARD HIGH LOAD HARDENER

Contains	Crystalline Silica (Quartz), 2,2,4-TRIMETHYLHEXANE-1,6 DIAMINE, 4-TERT.BUTYL PHENOL, m-XYLYLENEDIAMINE
Supplementary precautionary statements	P261 Avoid breathing vapour/ spray. P272 Contaminated work clothing should not be allowed out of the workplace. P321 Specific treatment (see medical advice on this label). 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

Crystalline Silica (Quartz) **10-30%**

CAS number: 14808-60-7 EC number: 231-545-4

Classification
Carc. 1A - H350

2,2,4-TRIMETHYLHEXANE-1,6 DIAMINE **10-30%**

CAS number: 3236-53-1

Classification
Acute Tox. 4 - H302
Skin Corr. 1B - H314
Skin Sens. 1 - H317
Aquatic Chronic 3 - H412

4-TERT.BUTYL PHENOL **1-5%**

CAS number: 98-54-4 EC number: 202-679-0

M factor (Chronic) = 1

Classification
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
Repr. 2 - H361f
Aquatic Chronic 1 - H410

m-XYLYLENEDIAMINE **1-5%**

CAS number: 1477-55-0 EC number: 216-032-5 REACH registration number: 01-2119480150-50-0000

Classification
Acute Tox. 4 - H302
Acute Tox. 4 - H332
Skin Corr. 1A - H314
Eye Dam. 1 - H318
Skin Sens. 1 - H317
Aquatic Chronic 3 - H412

WEARGUARD HIGH LOAD HARDENER

TITANIUM DIOXIDE		**<1%**
CAS number: 13463-67-7	EC number: 236-675-5	REACH registration number: 01-2119489379-17-0000

Classification
Not Classified

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

Composition comments EPOXY CURING AGENT

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 the label where possible).

Inhalation Move affected person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if any discomfort continues.

Ingestion Do not induce vomiting. Drink a few glasses of water or milk. Never give anything by mouth to an unconscious person. Do not induce vomiting. 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. Get medical attention if irritation persists after washing.

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 Avoid breathing fire gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Keep up-wind to avoid fumes. Control run-off water by containing and keeping it out of sewers and watercourses.

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

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. Eliminate all sources of ignition.

WEARGUARD HIGH LOAD HARDENER

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 non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. 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 Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients. Avoid contact with skin and eyes. Contaminated clothing and shoes must be discarded. 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

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

8.2. Exposure controls

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 European Standard EN166.

WEARGUARD HIGH LOAD HARDENER

Hand protection	Use protective gloves. It is recommended that gloves are made of the following material: Rubber (natural, latex). It is recommended that gloves are made of the following material: Butyl rubber. It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). It is recommended that gloves are made of the following material: Neoprene. 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

Appearance	Paste.
Colour	White.
Odour	Ammonia.
pH	pH (diluted solution): 9.5 5%
Melting point	N/D°C
Initial boiling point and range	>176°C @
Flash point	>121°C
Evaporation rate	<1 (butyl acetate =1)
Upper/lower flammability or explosive limits	Upper flammable/explosive limit: N/D Lower flammable/explosive limit: N/D
Vapour density	>1
Relative density	2.25 @ 20 ºC°C
Solubility(ies)	Slightly soluble in water.

9.2. Other information

Other information	Not available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Acids. Strong oxidising agents.

10.2. Chemical stability

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

WEARGUARD HIGH LOAD HARDENER

10.3. Possibility of hazardous reactions

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: Acids. Oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Fire or high temperatures create: Nitrous gases (NOx). Oxides of the following substances: Carbon monoxide (CO). Carbon dioxide (CO2). Vapours/gases/fumes of: Ammonia or amines.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 381,679.0

Acute toxicity - inhalation

ATE inhalation (gases ppm) 1,500,000.0

ATE inhalation (vapours mg/l) 36,667.0

ATE inhalation (dusts/mists mg/l) 500.0

Inhalation High concentrations may cause severe lung damage.

Ingestion Harmful if swallowed.

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.

Acute and chronic health hazards This product is corrosive. This product is corrosive. This product may cause skin and eye irritation. Prolonged contact may cause burns.

2,2,4-TRIMETHYLHEXANE-1,6 DIAMINE

Acute toxicity - oral

ATE oral (mg/kg) 500.0

SECTION 12: Ecological Information

Ecotoxicity Avoid releasing into the environment.

12.1. Toxicity

Toxicity Very toxic to aquatic organisms.

12.2. Persistence and degradability

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

WEARGUARD HIGH LOAD HARDENER

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

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

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.

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.

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

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. (NONYL PHENOL)

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (NONYL PHENOL)

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (NONYL PHENOL)

Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (NONYL PHENOL)

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

WEARGUARD HIGH LOAD HARDENER

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
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

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 (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date	04/04/2018
Revision	10
Supersedes date	28/04/2016
SDS number	20680
Hazard statements in full	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H332 Harmful if inhaled. H350 May cause cancer. H361f Suspected of damaging fertility. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

WEARGUARD HIGH LOAD HARDENER