SAFETY DATA SHEET
WEARGUARD FINE LOAD HARDENER

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

1.1. Product identifier
Product name          WEARGUARD FINE LOAD HARDENER
Product number        11470H

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          Acute Tox. 4 - H332 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361f
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.
                       H332 Harmful if inhaled.
                       H361f Suspected of damaging fertility.
                       H411 Toxic to aquatic life with long lasting effects.
WEARGUARD FINE LOAD HARDENER

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.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Contains
4-TERT.BUTYL PHENOL

Supplementary precautionary statements
P264 Wash contaminated skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation 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.
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

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<th>2,2,4-TRIMETHYLHEXANE-1,6 DIAMINE</th>
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<tr>
<td>Skin Sens. 1 - H317</td>
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<tr>
<td>Aquatic Chronic 3 - H412</td>
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<td>Skin Corr. 1A - H314</td>
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<td>Eye Dam. 1 - H318</td>
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<td>Skin Sens. 1 - H317</td>
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<tr>
<td>Aquatic Chronic 3 - H412</td>
<td></td>
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</tbody>
</table>
WEARGUARD FINE LOAD HARDENER

4-TERT.BUTYL PHENOL
CAS number: 98-54-4
M factor (Chronic) = 1
EC number: 202-679-0

5-10%

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

CAS number: 13463-67-7
EC number: 236-675-5
REACH registration number: 01-2119489379-17-0000

<1%

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. 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. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention immediately.

Skin contact
Remove contaminated clothing immediately and wash skin 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. Continue to rinse for at least 15 minutes. 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 the following media: Water spray. Carbon dioxide (CO2). Dry chemicals. Foam.

5.2. Special hazards arising from the substance or mixture

Specific hazards
Avoid breathing fire gases or vapours.

5.3. Advice for firefighters
**WEARGUARD FINE LOAD HARDENER**

**Protective actions during firefighting**

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.

**Special protective equipment for firefighters**

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

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**SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions**

Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes. Use suitable respiratory protection if ventilation is inadequate.

6.2. Environmental precautions

Environmental precautions

Avoid discharge into drains or watercourses or onto the ground. Spillage 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.

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**SECTION 7: Handling and storage**

7.1. Precautions for safe handling

**Usage precautions**

Provide adequate ventilation. Do not use in confined spaces without adequate ventilation and/or respirator. Keep away from heat, sparks and open flame. Avoid contact with skin and eyes. 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.

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**SECTION 8: Exposure Controls/personal protection**

8.1. Control parameters

**Occupational exposure limits**

**QUARTZ**

Long-term exposure limit (8-hour TWA): 0.3 mg/m³

**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
WEARGUARD FINE LOAD HARDENER

Protective equipment

Appropriate engineering controls
Provide adequate general and local exhaust ventilation.

Eye/face protection
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
Use protective gloves. It is recommended that gloves are made of the following material: Rubber (natural, latex). 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 chemical protective suit.

Hygiene measures
Provide eyewash station and safety shower. Keep away from food, drink and animal feeding stuffs. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

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. Ammonia.

pH
pH (concentrated solution): 10.5

Melting point
N/D°C

Initial boiling point and range
>176°C @

Flash point
>121°C

Upper/lower flammability or explosive limits
Lower flammable/explosive limit: N/D Upper flammable/explosive limit: N/D

Relative density
2.25 @ °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
WEARGUARD FINE LOAD HARDENER

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

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 exposure to high temperatures or direct sunlight.

10.5. Incompatible materials
Materials to avoid
Avoid contact with the following materials: Acids. Oxidising agents.

10.6. Hazardous decomposition products
Hazardous decomposition products
Thermal decomposition or combustion products may include the following substances: Nitrous gases (NOx). 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) 25,000.0

Acute toxicity - inhalation
ATE inhalation (gases ppm) 4,500.0
ATE inhalation (vapours mg/l) 11.0

Skin contact
Causes burns. Corrosive. Prolonged contact causes serious tissue damage. May cause sensitisation by skin contact. May cause sensitisation or allergic reactions in sensitive individuals.

Eye contact
Causes burns. This product is strongly corrosive. Causes severe burns. Immediate first aid is imperative. Risk of serious damage to eyes.

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 release 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
Toxicity
Not considered toxic to fish.

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

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number
No information required.

14.2. UN proper shipping name
No information required.

14.3. Transport hazard class(es)
No information required.

14.4. Packing group
No information required.

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant No.

14.6. Special precautions for user
No information required.

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
WEARGUARD FINE LOAD HARDENER

EU legislation

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

SECTION 16: Other information

Revision date 04/04/2018
Revision 12
Supersedes date 28/04/2016

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.
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.

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.