SAFETY DATA SHEET
ULTRA QUARTZ HARDENER

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

1.1. Product identifier
Product name: ULTRA QUARTZ HARDENER
Product number: 13550

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Hardener. Two-component, epoxy-based adhesive.
Uses advised against: No specific uses advised against are identified.

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 - H302 Acute Tox. 3 - H331 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361fd

Environmental hazards: Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

2.2. Label elements
Pictogram

Signal word: Danger
 ULTRA QUARTZ HARDENER

Hazard statements

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H331 Toxic if inhaled.
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe vapour/spray.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P310 Immediately call a POISON CENTER/doctor.

Contains

NONYLPHENOL, BENZYL ALCOHOL, ISOPHORONEDIAMINE, 2-PIPERAZIN-1-YLETHYLAMINE, BENZOIC ACID, 2-HYDROXY-(SALICYCLIC ACID)

Supplementary precautionary statements

P201 Obtain special instructions before use.
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.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of water.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
P311 Call a POISON CENTER/doctor.
P321 Specific treatment (see medical advice on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P363 Wash contaminated clothing 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
# ULTRA QUARTZ HARDENER

**Nonylphenol**
- CAS number: 25154-52-3
- EC number: 246-672-0
- M factor (Acute) = 1
- M factor (Chronic) = 1

**Classification**
- Acute Tox. 4 - H302
- Skin Corr. 1B - H314
- Eye Dam. 1 - H318
- Repr. 2 - H361fd
- Aquatic Acute 1 - H400
- Aquatic Chronic 1 - H410

**Benzyl Alcohol**
- CAS number: 100-51-6
- EC number: 202-859-9

**Classification**
- Acute Tox. 4 - H302
- Acute Tox. 4 - H332

**Isophorone Diamine**
- CAS number: 2855-13-2
- EC number: 220-666-8

**Classification**
- Acute Tox. 4 - H302
- Acute Tox. 4 - H312
- Skin Corr. 1B - H314
- Eye Dam. 1 - H318
- Skin Sens. 1 - H317
- Aquatic Chronic 3 - H412

**2-Piperazin-1-Yethylamine**
- CAS number: 140-31-8
- EC number: 205-411-0
- REACH registration number: 01-2119471486-30-0003

**Classification**
- Acute Tox. 4 - H302
- Acute Tox. 4 - H312
- Skin Corr. 1B - H314
- Eye Dam. 1 - H318
- Skin Sens. 1 - H317
- Aquatic Chronic 3 - H412

**Benzonic Acid, 2-Hydroxy-(Salicylic Acid)**
- CAS number: 69-72-7

**Classification**
- Acute Tox. 4 - H312
- Eye Dam. 1 - H318
ULTRA QUARTZ HARDENER

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
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. For breathing difficulties, oxygen may be necessary. Get medical attention.

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. 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. Remove contaminated clothing immediately and wash skin with soap and water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

Eye contact
Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

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.

Inhalation
Vapour may irritate respiratory system/lungs. Toxic if inhaled.

Ingestion
Harmful if swallowed. This product is corrosive. May cause chemical burns in mouth, oesophagus and stomach.

Skin contact
This product is corrosive. Causes severe skin burns and eye damage. Burning pain and severe corrosive skin damage. May cause skin sensitisation or allergic reactions in sensitive individuals.

Eye contact
This product is corrosive. Causes severe burns. Causes serious eye damage. Symptoms following overexposure may include the following: Corneal damage. Chemical burns. Severe irritation, burning, tearing and blurred vision.

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 alcohol-resistant foam, carbon dioxide or dry powder.

Unsuitable extinguishing media
Do not use water, if avoidable. Do not use the following: Foam.

5.2. Special hazards arising from the substance or mixture

Specific hazards
Toxic gases or vapours. Explosive when mixed with oxidising substances.

5.3. Advice for firefighters

Protective actions during firefighting
Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses.
ULTRA QUARTZ HARDENER

Special protective equipment for firefighters
Warn everybody of potential hazards and evacuate if necessary. Keep upwind. Avoid contact with skin and eyes. 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
Do not touch or walk into spilled material. If leakage cannot be stopped, evacuate area. Eliminate all sources of ignition. Provide adequate ventilation.

6.2. Environmental precautions
Environmental precautions
Do not discharge into drains or watercourses or onto the ground. 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
Avoid contact with skin and eyes. If ventilation is inadequate, suitable respiratory protection must be worn. Do not eat, drink or smoke when using the product. Wash hands after contact. Wash at the end of each work shift and before eating, smoking and using the toilet. Discard contaminated shoes and clothing.

7.2. Conditions for safe storage, including any incompatibilities
Storage precautions
Keep away from heat, sparks and open flame. Do not store near heat sources or expose to high temperatures. Store away from the following materials: Acids. Alkalis. Avoid contact with strong oxidising agents. Store in tightly-closed, original container in a dry, cool and well-ventilated place.

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

2-Piperazin-1-ylethylamine (CAS: 140-31-8)

DNEL
Workers - Inhalation; Long term systemic effects: 3.6 mg/m³
Workers - Inhalation; Short term systemic effects: 21.4 mg/m³
Workers - Dermal; Long term systemic effects: 3.3 mg/kg/day
Workers - Dermal; Long term systemic effects: 20 mg/kg/day
Workers - Dermal; Long term local effects: 0.006 mg/cm²

8.2. Exposure controls
ULTRA QUARTZ HARDENER

Protective equipment

Appropriate engineering controls
Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients. This product must not be handled in a confined space without adequate ventilation.

Eye/face protection
Wear tight-fitting, chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection
Use protective gloves. Neoprene. Butyl rubber. Nitrile rubber. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. 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. Wash hands after contact. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.

Respiratory protection
If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Gas filter, type A2. Ensure all respiratory protective equipment is suitable for its intended use and is ‘CE’-marked. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140. Gas and combination filter cartridges should comply with European Standard EN14387.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance
Viscous liquid.

Colour
Amber.

Odour
Fishy.

pH
pH (diluted solution): Alkaline 5% Solution

Initial boiling point and range
200°C @

Evaporation rate
<<1

Vapour pressure
<10.34 mm Hg @ °C

Vapour density
>1

Relative density
0.99 @ °C

9.2. Other information

Other information
Not available.

Volatile organic compound
This product contains a maximum VOC content of 0 g/l.

SECTION 10: Stability and reactivity
ULTRA QUARTZ HARDENER

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
Possibility of hazardous reactions
Not available.

10.4. Conditions to avoid
Conditions to avoid
Unsuitable containers: copper, zinc, aluminium, copper alloy, zinc alloy, aluminium alloy.

10.5. Incompatible materials
Materials to avoid

10.6. Hazardous decomposition products
Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral
ATE oral (mg/kg) 54,951.0

Acute toxicity - dermal
ATE dermal (mg/kg) 249,943.0

Acute toxicity - inhalation
ATE inhalation (vapours mg/l) 3.0

Inhalation
May cause respiratory system irritation. Vapours irritate the respiratory system. May cause coughing and difficulties in breathing. Coughing, chest tightness, feeling of chest pressure. Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Headache. Fatigue. Nausea, vomiting.

Ingestion
The product irritates mucous membranes and may cause abdominal discomfort if swallowed. Harmful: may cause lung damage if swallowed. Swallowing concentrated chemical may cause severe internal injury. Drowsiness, dizziness, disorientation, vertigo. Headache. Nausea, vomiting.

Skin contact
Corrosive. Prolonged contact causes serious tissue damage. Severe skin irritation. May cause serious chemical burns to the skin. May be absorbed through the skin.

Eye contact
This product is strongly corrosive. Immediate first aid is imperative. Irritation, burning, lachrymation, blurred vision after liquid splash. May cause temporary blindness and severe eye damage.

Route of entry
Skin and/or eye contact Skin absorption Ingestion. Inhalation

Medical considerations
Skin disorders and allergies. Pre-existing eye problems.

SECTION 12: Ecological Information
ULTRA QUARTZ HARDENER

Ecotoxicity

Avoid release to the environment. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic 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.

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) 2922
UN No. (IMDG) 2922
UN No. (ICAO) 2922

14.2. UN proper shipping name

Proper shipping name (ADR/RID) CORROSIVE LIQUID, TOXIC, N.O.S. (ISOPHORONEDIAMINE, NONYLPHENOL)
Proper shipping name (IMDG) CORROSIVE LIQUID, TOXIC, N.O.S. (ISOPHORONEDIAMINE, NONYLPHENOL)
Proper shipping name (ICAO) CORROSIVE LIQUID, TOXIC, N.O.S. (ISOPHORONEDIAMINE, NONYLPHENOL)

14.3. Transport hazard class(es)

ADR/RID class 8
ADR/RID subsidiary risk 6.1
ULTRA QUARTZ HARDENER

ADR/RID label 8 & 6.1
IMDG class 8
IMDG subsidiary risk 6.1
ICAO class/division 8
ICAO subsidiary risk 6.1

Transport labels

14.4. Packing group
ADR/RID 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 Identification Number (ADR/RID) 86

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

Revision date 04/04/2018
Revision 8
Supersedes date 12/01/2017
ULTRA QUARTZ HARDENER

Hazard statements in full

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.
H318 Causes serious eye damage.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
H400 Very toxic to aquatic life.
H410 Very 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.