Material Safety Data Sheet

Hazardous according to criteria of Worksafe Australia

EPIREZ Supatuff Acid resistant Coating [AR] Hardener

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

ITW Polymers & Fluids Pty Ltd
100 Hassall St Wetherill Park NSW 2164 Australia
Ph: +61 2 9757 8800 Fax: +61 2 9757 3855
Emergency: 000

Product Name: EPIREZ Supatuff Acid Resistant Coating Hardener or EPIREZ Supatuff AR Hardener
Synonyms: Amine Adduct
Manufacturer's Product Code(s): E992856, E992799.
Use: Acid Resistant Coating Hardener
UN Number: 1760
Proper Shipping Name: CORROSIVE LIQUID, N.O.S.
Dangerous Goods Class: 8
Subsidiary risk: None allocated
Packing Group: III
Hazchem Code: 3X
Poison Schedule: S5

2. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME	Proportion	CAS Number
AMINE ADDUCT	> 60%	1761-71-3
OTHER NON-SCHEDULED	To 100	Free

3. HAZARD IDENTIFICATION

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Hazard Category: Harmful, Corrosive

ACUTE HEALTH EFFECTS
Swallowed:
Harmful if swallowed.
Will cause burns to the mouth, mucous membranes, throat, oesophagus and stomach. If sufficient quantities are ingested (swallowed) death may occur.

Eye:
Will cause burns to the eyes with effects including: Pain, tearing, conjunctivitis and if duration of exposure is long enough, blindness will occur.

Skin:
Will cause burns to the skin, with effects including; Redness, blistering, localised pain and dermatitis.

Inhaled:
Will cause severe irritation to the nose, throat and respiratory system with effects including: Dizziness, headache, coughing, loss of co-ordination, chest pains, respiratory paralysis and or failure.

Chronic:
Prolonged or repeated exposure may lead to irreversible damage to health.
Prolonged or repeated skin contact will lead to necrosis (death) of the skin.

4. FIRST AID MEASURES

Swallowed:
If swallowed, DO NOT induce vomiting. If victim is conscious give 3 to 4 glasses of water to drink. Urgently transport to hospital or doctor.

Eye:
If material is splashed into eyes, flush with plenty of water for at least 15 minutes, ensuring eye lids are held open. Immediately transport to hospital or doctor.

Skin:
If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with water and soap. Immediately transport to hospital or doctor.

Inhaled:
Remove victim to fresh air. Do not use mouth-to-mouth method if victim inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult.

First Aid Facilities:
Eye wash fountain, safety shower and normal wash room facilities.

Advice to Doctor:
Due to the potential for esophageal or gastrointestinal tract burns following ingestion, emesis should not be induced and gastric lavage done only with caution. Immediate dilution with water or milk might be beneficial.

5. FIRE-FIGHTING MEASURES

Fire/Explosion Hazard
EXTINGUISHING MEDIA: Use dry chemical, carbon dioxide, foam or water fog.
SPECIAL FIRE FIGHTING PROCEDURES: Self-contained breathing apparatus (SCBA) required for fire-fighting personnel. If possible to do so safely, shut off fuel to fire. Use water spray to spray to cool fire-exposed surfaces and to protect personnel.
UNUSUAL FIRE AND EXPLOSION HAZARDS: If tanks, drums or containers of this material are heated, they may rupture and project corrosive materials over a wide area.

Flammability
Heat or damage to containers may release corrosive or toxic fumes.

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY ACTION:
Keep unnecessary people away; Isolate hazard area and deny entry. Stay upwind; Keep out of low areas. Do not walk or touch spilt material unless wearing personal protection as outlined under MSDS.
SPILL OR LEAK PROCEDURE:
Shut off ignition sources, no flares, smoking or flames in hazard area. Stop leak if you can do it without risk. Water spray may reduce vapour.
SMALL SPILLS:
Take up with sand, dirt or vermiculite. DO NOT use sawdust. Use non-sparking tools. Place into labeled drum(s) for later disposal.

LARGE SPILLS:
Notify Emergency Services (Police or Fire Brigade). Tell them exact location, nature, hazards, quantities, type of vehicle and any other information that would be helpful. Contain spill. Remove all ignition sources and safely stop flow of spill. Bund area. Trained personnel should wear Personal Protective equipment as highlighted in this MSDS. Blanket the spill with foam or use water fog to disperse vapour clouds. Consult an expert regarding disposal of this product.

7. HANDLING AND STORAGE

Avoid prolonged breathing of vapors and skin or eye contact. Store in a cool place and out of direct sunlight. Store away from sources of heat or ignition. Store away from oxidizing agents and strong acids. Keep containers tightly closed, when not using the product. Store in original packages as approved by manufacturer.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards

No exposure standards have been assigned by the National Occupational Health & Safety Commission (NOHSC) for this product or any of the components:
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AMINE ADDUCT
No Exposure details available

Engineering Controls
Corrosive liquid. Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate unless the material is heated, reacted or otherwise changed in some type of chemical reaction, then the use of a local exhaust ventilation system is recommended.

Personal Protection Equipment
CLOTHING: Neoprene or nitrile apron
GLOVES: Gauntlet length Neoprene or nitrile.
EYES: Chemical goggles or faceshield to protect eyes.
RESPIRATORY PROTECTION: Avoid breathing of vapours. Select and use respirators in accordance with AS/NZS 1715/1716. The use of a half-face organic vapour with combined P1 (dust/mist) respirator with replaceable filters is recommended. Filter capacity and respirator type depends on exposure levels and type of contaminant. If entering spaces where the airborne concentration of a contaminant is unknown then the use of a Self-contained breathing apparatus (SCBA) with positive pressure air supply complying with AS/NZS 1715 / 1716, or any other acceptable International Standard is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear Liquid
Boiling Point Melting Point:	Not Determined
Vapour Pressure:	N/A
Specific Gravity:	1.01 gm /ml
Flash Point:	N/A
Flammability Limits:	N/A
Solubility in Water:	Insoluble

10. STABILITY AND REACTIVITY

STABILITY:
Stable under normal conditions of use.

HAZARDOUS DECOMPOSITION PRODUCTS:
Emits choking and corrosive fumes when heated to decomposition.

HAZARDOUS POLYMERIZATION:
Will not occur.

INCOMPATIBILITIES:
Strong alkalis and oxidizing agents.

CONDITIONS TO AVOID:
Incompatibles.

11. TOXICOLOGICAL INFORMATION

There is no toxicological information available for this product.

12. ECOLOGICAL INFORMATION

This substance may cause long term adverse effects in the aquatic environment.
This substance may cause long term adverse effects in the environment

13. DISPOSAL CONSIDERATIONS

Refer to appropriate authority in your State. Dispose of material through a licensed waste contractor. Advise on corrosive nature. Normally suitable for disposal by approved waste disposal agent.

14. TRANSPORT INFORMATION

UN Number: 1760
Proper Shipping Name: CORROSIVE LIQUID, N.O.S.
Dangerous Goods Class: 8
Subsidiary risk: None allocated
Packing Group: III
Hazchem Code: 3X

Classified as a CLASS 8 (CORROSIVE) Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail, 6th Edition.

Dangerous goods of Class 8 (Corrosive) are incompatible in a placard load with any of the following:
- Class 1
- Class 4.3
- Class 5
- Class 6, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids

- Class 7

and are incompatible with food and food packaging in any quantity.

Emergency information(Transport):
Dangerous Goods - Initial Emergency Response Guide (SAA/SNZ HB76:1997)
For TOXIC AND/OR CORROSIVE Guide No: 37

15. REGULATORY INFORMATION

Poison Schedule: S5
This material is a Scheduled **S5** Poison and must be stored, handled and used according to the appropriate regulations.

RISK PHRASES
R22 Harmful if swallowed.
R34 Causes burns.

SAFETY PHRASES
S2 Keep out of reach of children.
S26 In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre.
S28 After contact with skin, wash immediately with plenty of warm soapy water.
S36 Wear suitable protective clothing.

16. OTHER INFORMATION

Contact Point
Technical Manager: (02) 9757 8800
Disclaimer
The information herein is to the best of our knowledge, correct and complete. It describes the safety requirements for this product and should not be construed as guaranteeing specific properties. Since methods and conditions are beyond our control we do not accept liability for any damages resulting from the use of, or reliance on, this information in inappropriate contexts.

Material Safety Data Sheet

Hazardous according to criteria of Worksafe Australia

EPIREZ Supatuff Acid Resistant Coating [AR] Compound

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

ITW Polymers & Fluids Pty Ltd
100 Hassall St Wetherill Park NSW 2164 Australia
Ph: +61 2 9757 8800 Fax: +61 2 9757 3855
Emergency: 000

Product Name: EPIREZ Supatuff Acid Resistant Coating Compound or EPIREZ Supatuff AR Compound
Synonyms: Epoxide Resin
Manufacturer's Product Code: E992799, E992856.
Use: Acid Resistant Coating-Part I
UN Number: 1993
Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.
Dangerous Goods Class: 3
Subsidiary risk: None Allocated
Packing Group: III
Hazchem Code: 3[Y]
Poison Schedule: S5

2. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME	Proportion	CAS Number
EPOXY RESIN	30 to 60%	25068-38-6
HYDROCARBON SOLVENTS	1 to 10%	1330-20-7
OYHER NON-SCHEDULED	To 100	Free

3. HAZARD IDENTIFICATION

Hazardous according to the criteria of Worksafe Australia

Hazard Category: Irritant

ACUTE HEALTH EFFECTS
Swallowed:
May cause irritation to mouth, throat and stomach with effects including mucous build up, irritation to the tongue and lips and pains in the stomach, which may lead to nausea, vomiting and diarrhoea.

Eye:
Will cause irritation to the eyes, with effects including: tearing, pain, stinging and blurred vision. Depending upon duration of exposure, eye damage may occur.

Skin:
Will cause irritation to the skin, with effects including; Redness, itchiness, and possible dermatitis.

Inhaled:
May cause irritation to the nose, throat and respiratory system with effects including: Dizziness, headache and loss of co-ordination.

Chronic:
Prolonged or repeated skin contact may lead to dermatitis.
Prolonged contact may cause severe eye irritation and some form of permanent eye damage may occur.
Prolonged or repeated contact with this substance will cause sensitisation by skin contact.

4. FIRST AID MEASURES

Swallowed:
If swallowed, DO NOT induce vomiting. Give 3 to 4 glasses of water to drink. Seek urgent medical assistance.

Eye:
If material is splashed into eyes, flush with plenty of water for at least 15 minutes, ensuring eye lids are held open. Immediately transport to hospital or doctor.

Skin:
If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with soap and water. If irritation persists immediately transport to hospital or doctor.

Inhaled:
Remove victim to fresh air. Apply resuscitation if victim is not breathing - Administer oxygen if breathing is difficult.

First Aid Facilities:
Eye wash fountain, safety shower and normal wash room facilities.

Advice to Doctor:
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Fire/Explosion Hazard
EXTINGUISHING MEDIA: Use dry chemical, carbon dioxide or foam.
SPECIAL FIRE FIGHTING PROCEDURES: Self-contained breathing apparatus (SCBA) required for fire-fighting personnel. If possible to do so safely, shut off fuel to fire. Use water spray to spray to cool fire-exposed surfaces and to protect personnel. Avoid spreading burning liquid with water used for cooling fire exposed containers when using water spray, boil-over may occur when the product temperature reaches the boiling point of water.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapours from this product may travel or be moved by air currents and be ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharge or other ignition sources at locations distant from the point of handling.

Flammability
Flammable liquid. Avoid all sources of ignition, heat and naked flames.

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY ACTION:
Keep unnecessary people away; Isolate hazard area and deny entry. Stay upwind; Keep out of low areas. Do not walk or touch spilt material unless wearing personal protection as outlined under MSDS.
SPILL OR LEAK PROCEDURE:
Shut off ignition sources, no flares, smoking or flames in hazard area. Stop leak if you can do it without risk. Water spray may reduce vapour; but it may not prevent ignition in closed spaces.
SMALL SPILLS:
Take up with sand, dirt or vermiculite. DO NOT use sawdust. Use non-sparking tools or HEPA vacuum system. Place into labelled drum(s) for later disposal.

LARGE SPILLS:
Notify Emergency Services (Police or Fire Brigade). Tell them exact location, nature, hazards, quantities, type of vehicle and any other information that would be helpful. Contain spill. Remove all ignition sources and safely stop flow of spill. Bund area. Trained personnel should wear Personal Protective equipment as highlighted in this MSDS. Blanket the spill with foam or use water fog to disperse vapour clouds. Consult an expert regarding disposal of this product.

7. HANDLING AND STORAGE

Store in a cool place and out of direct sunlight. Store away from sources of heat or ignition, strong alkalis, acids, combustibles and oxidizing agents. All equipment must be earthed. Store in original packages as approved by manufacturer. For further information please refer to the Engineering Controls of this MSDS.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards

No exposure standards are available for this product, however, the following exposure standards have been assigned by the National Occupational Health & Safety Commission (NOHSC) to the following components of the product:

EPOXY RESIN
No exposure standards have been assigned by the National Occupational Health & Safety Commission (NOHSC)

HYDTOCARBON SOLVENTS
(Worksafe Australia)
[TWA]80 ppm 350 mg/m³
[STEL]150 ppm655 mg/m³

References: A;R

(ACGIH)
[TWA]100 ppm 434 mg/m³
[STEL]150 ppm651 mg/m³

Carcinogen Category: A4

Notices: BEI

Engineering Controls
Flammable liquid. Maintain adequate ventilation at all times. Prevent accumulation of vapours in hollows or sumps. Eliminate any sources of ignition. Elevated temperature or mechanical action may form vapours, mists or fumes which may require local exhaust ventilation systems.

Personal Protection Equipment
CLOTHING: PVC or rubber apron.
GLOVES: PVC or rubber.
EYES: Chemical goggles or faceshield to protect eyes.
RESPIRATORY PROTECTION: Avoid breathing of vapours/gases. Select and use respirators in accordance with AS/NZS 1715/1716. When vapours/gases exceed the exposure standards then the use of a half-face respirator with organic vapour cartridge is recommended. For high concentration use an atmosphere-supplied, positive pressure demand self-contained or airline breathing apparatus, complying with the

requirements of AS/NZS 1715 is recommended. Filter capacity and respirator type depends on exposure levels and type of contaminant.

If entering spaces where the airborne concentration of a contaminant is unknown then the use of a Self-contained breathing apparatus (SCBA) with positive pressure air supply complying with AS/NZS 1715 / 1716, or any other acceptable International Standard is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Thick Grey Paste
Boiling Point Melting Point:	N/A
Vapour Pressure:	N/A
Specific Gravity:	1.4-1.5 gm /ml
Flash Point:	28 ° C (Pensky Martin Closed Cup)
Flammability Limits:	N/A
Solubility in Water:	Insoluble

10. STABILITY AND REACTIVITY

STABILITY:
Stable under normal conditions of use.

HAZARDOUS DECOMPOSITION PRODUCTS:
Emits oxides of carbon when heated to decomposition.

HAZARDOUS POLYMERIZATION:
Will not occur.

INCOMPATIBILITIES:
Chlorates, perchlorates, chromates, dichromates, nitrates and other oxidizing agents.

CONDITIONS TO AVOID:
Heat, flames, ignition sources and incompatibles.

11. TOXICOLOGICAL INFORMATION

There is no toxicological information available for this product.

12. ECOLOGICAL INFORMATION

This substance may cause long term adverse effects in the environment

13. DISPOSAL CONSIDERATIONS

Refer to appropriate authority in your State. Dispose of material through a licensed waste contractor. Advise flammable nature. Normally suitable for disposal by approved waste disposal agent.

14. TRANSPORT INFORMATION

UN Number: 1993
Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.
Dangerous Goods Class: 3
Subsidiary risk: None Allocated
Packing Group: III
Hazchem Code: 3[Y]

Classified as a CLASS 3 (FLAMMABLE LIQUID) Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail, 6th Edition.

Dangerous goods of Class 3 (Flammable Liquid) are incompatible in a placard load with any of the following:

- Class 1
- Class 2.1, if both the Class 3 and Class 2.1 dangerous goods are in bulk
- Class 2.3
- Class 4.2
- Class 5
- Class 6, if the Class 3 dangerous goods are nitromethane
- Class 7

Emergency information(Transport):
Dangerous Goods - Initial Emergency Response Guide (SAA/SNZ HB76:1997)
For LIQUIDS - Flammable, Guide No: 15

15. REGULATORY INFORMATION

Poison Schedule: S5
This material is a Scheduled **S5** Poison and must be stored, handled and used according to the appropriate regulations.

RISK PHRASES
R10 Flammable
R36/38 Irritating to eyes and skin.
R43 May cause sensitisation by skin contact.

SAFETY PHRASES
S2 Keep out of reach of children.
S25 Avoid contact with eyes.
S28 After contact with skin, wash immediately with plenty of warm saopy water.
S37/39 Wear suitable gloves and eye/face protection.

16. OTHER INFORMATION

Contact Point
Technical Manager: (02) 9757 8800
Disclaimer
The information herein is to the best of our knowledge, correct and complete. It describes the safety requirements for this product and should not be construed as guaranteeing specific properties. Since methods and conditions are beyond our control we do not accept liability for any damages resulting from the use of, or reliance on, this information in inappropriate contexts.