

# SAFETY DATA SHEET Epoxy Resin ER2220, Part B

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name Epoxy Resin ER2220, Part B

Product number ER2220B, EER2220RP250G, EER2220K5K, ZE

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

**Identified uses** Hardener.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier ELECTROLUBE. A division of HK WENTWORTH LTD

ASHBY PARK, COALFIELD WAY,

ASHBY DE LA ZOUCH, LEICESTERSHIRE LE65 1JR

UNITED KINGDOM +44 (0)1530 419600 +44 (0)1530 416640 info@hkw.co.uk

1.4. Emergency telephone number

Emergency telephone IN CASE OF EMERGENCY CALL:

+44 1865 407333 (24hr, Provided by Carechem 24)

+353 (0)1 809 2166 (Beaumont Hospital, Republic of Ireland only, 8am-10pm, 7 days a week)

## 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. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens.

1 - H317

**Environmental hazards** Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms





Signal word Danger

**Hazard statements** H302+H312 Harmful if swallowed or 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.

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**Precautionary statements** P280 Wear protective gloves/ protective clothing/ eye protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water or shower.

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. P501 Dispose of contents/ container in accordance with national regulations.

Contains 3-aminomethyl-3,5,5-trimethylcyclohexylamine, salicylic acid

Supplementary precautionary

statements

P260 Do not breathe vapour/ spray.

P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product.

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 CENTRE/doctor if you feel unwell.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 Immediately call a POISON CENTER/ doctor.

P362+P364 Take off contaminated clothing and wash it before reuse.

P363 Wash contaminated clothing before reuse.

## 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

# 3-aminomethyl-3,5,5-trimethylcyclohexylamine 60-100%

CAS number: 2855-13-2 EC number: 220-666-8 REACH registration number: 01-

2119514687-32-XXXX

#### 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

salicylic acid 1-5%

CAS number: 69-72-7

## Classification

Acute Tox. 4 - H302 Eye Dam. 1 - H318

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xylene <1%

CAS number: 1330-20-7 EC number: 215-535-7 REACH registration number: 01-

2119488216-32-XXXX

Classification

Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315

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** Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.

Chemical burns must be treated by a physician.

Inhalation Remove affected person from source of contamination. Move affected person to fresh air and

keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on

their side in the recovery position and ensure breathing can take place.

**Ingestion** Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water

or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing

such as collar, tie or belt.

Skin contact It is important to remove the substance from the skin immediately. Take off immediately all

contaminated clothing. Rinse immediately with plenty of water. Continue to rinse for at least

15 minutes and get medical attention. Chemical burns must be treated by a physician.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 10 minutes.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue. If it is

suspected that volatile contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth

resuscitation.

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

General information See Section 11 for additional information on health hazards. The severity of the symptoms

described will vary dependent on the concentration and the length of exposure.

**Inhalation** A single exposure may cause the following adverse effects: Severe irritation of nose and

throat. Symptoms following overexposure may include the following: Corrosive to the

respiratory tract.

**Ingestion** May cause sensitisation or allergic reactions in sensitive individuals. May cause chemical

burns in mouth, oesophagus and stomach. Symptoms following overexposure may include

the following: Severe stomach pain. Nausea, vomiting.

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Skin contact May cause skin sensitisation or allergic reactions in sensitive individuals. Causes severe

burns. Symptoms following overexposure may include the following: Pain or irritation.

Redness. Blistering may occur.

**Eye contact** Causes serious eye damage. Symptoms following overexposure may include the following:

Pain. Profuse watering of the eyes. Redness.

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

Notes for the doctor Treat symptomatically. May cause sensitisation or allergic reactions in sensitive individuals.

## SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry

powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

# 5.2. Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up.

This product is toxic. Severe corrosive hazard. Water used for fire extinguishing, which has

been in contact with the product, may be corrosive.

Hazardous combustion products

Thermal decomposition or combustion products may include the following substances: Very

toxic or corrosive gases or vapours.

## 5.3. Advice for firefighters

Protective actions during firefighting

Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters

Regular protection may not be safe. Wear chemical protective suit. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

#### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions No action shall be taken wit

No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Avoid inhalation of vapours and spray/mists. Use suitable respiratory protection if ventilation is inadequate. Avoid contact with skin and eyes. Avoid contact with contaminated tools and objects.

# 6.2. Environmental precautions

**Environmental precautions** 

Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

# Epoxy Resin ER2220, Part B

## 6.3. Methods and material for containment and cleaning up

## Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. This product is corrosive. Provide adequate ventilation. Approach the spillage from upwind. Small Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Large Spillages: If leakage cannot be stopped, evacuate area. Flush spilled material into an effluent treatment plant, or proceed as follows. Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labelled, sealed containers. Clean contaminated objects and areas thoroughly, observing environmental regulations. The contaminated absorbent may pose the same hazard as the spilled material. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## 6.4. Reference to other sections

#### Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

# 7.1. Precautions for safe handling

# Usage precautions

Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. This product is corrosive. Immediate first aid is imperative. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

# Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store away from incompatible materials (see Section 10). Store in accordance with local regulations. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.

# Storage class

Corrosive storage.

# 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

## xylene

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³ Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³ Sk

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WEL = Workplace Exposure Limit Sk = Can be absorbed through the skin.

#### 8.2. Exposure controls

## Protective equipment













# Appropriate engineering controls

Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.

## Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

## Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. 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. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

# Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

#### Hygiene measures

Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.

## Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. 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.

# Environmental exposure controls

Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

Appearance Liquid.

Colour Black.

# Epoxy Resin ER2220, Part B

Odour Not known.

Odour threshold Not available.

pН Not available.

Melting point Not available.

Initial boiling point and range Not available.

Flash point Not available.

Not available. **Evaporation rate** 

**Evaporation factor** Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or

explosive limits

Not available.

Other flammability Not available.

Not available. Vapour pressure

Vapour density Not available.

Relative density Not available.

**Bulk density** 0.93 kg/l

Solubility(ies) Not available.

Partition coefficient Not available.

Not available. **Auto-ignition temperature** 

Not available. **Decomposition Temperature** 

Viscosity 25 mPa s @ 23°C/73.4°F

**Explosive properties** Not considered to be explosive.

Oxidising properties Does not meet the criteria for classification as oxidising.

#### 9.2. Other information

# SECTION 10: Stability and reactivity

## 10.1. Reactivity

See the other subsections of this section for further details. Reactivity

10.2. Chemical stability

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

prescribed storage conditions.

# 10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

No potentially hazardous reactions known.

# 10.4. Conditions to avoid

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

## 10.5. Incompatible materials

# Epoxy Resin ER2220, Part B

Materials to avoid

No specific material or group of materials is likely to react with the product to produce a

hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition

Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Corrosive gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

products

Notes (oral LD<sub>50</sub>) Acute Tox. 4 - H302 Harmful if swallowed.

**ATE oral (mg/kg)** 1,047.05

Acute toxicity - dermal

Notes (dermal LD₅₀) Acute Tox. 4 - H312 Harmful in contact with skin.

ATE dermal (mg/kg) 1,144.2

Acute toxicity - inhalation

Notes (inhalation LC50) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Skin Corr. 1B - H314 Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation Eye Dam. 1 - H318 Corrosive to skin. Corrosivity to eyes is assumed.

Respiratory sensitisation

**Respiratory sensitisation** Based on available data the classification criteria are not met.

Skin sensitisation

**Skin sensitisation** May cause skin sensitisation or allergic reactions in sensitive individuals.

Germ cell mutagenicity

**Genotoxicity - in vitro**Based on available data the classification criteria are not met.

Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

IARC carcinogenicity Contains a substance which may be potentially carcinogenic. IARC Group 3 Not classifiable

as to its carcinogenicity to humans.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity -

Based on available data the classification criteria are not met.

development

Specific target organ toxicity - single exposure

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure 
Not classified as a specific target organ toxicant after repeated exposure.

**Aspiration hazard** 

**Aspiration hazard** Based on available data the classification criteria are not met.

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General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure.

**Inhalation** Corrosive to the respiratory tract. Symptoms following overexposure may include the

following: Severe irritation of nose and throat.

Ingestion May cause sensitisation or allergic reactions in sensitive individuals. May cause chemical

burns in mouth, oesophagus and stomach. Symptoms following overexposure may include

the following: Severe stomach pain. Nausea, vomiting.

Skin contact May cause skin sensitisation or allergic reactions in sensitive individuals. Causes severe

burns. Symptoms following overexposure may include the following: Pain or irritation.

Redness. Blistering may occur.

**Eye contact** Causes serious eye damage. Symptoms following overexposure may include the following:

Pain. Profuse watering of the eyes. Redness.

Route of exposure Ingestion Inhalation Skin and/or eye contact

**Target organs** No specific target organs known.

**Medical considerations** Skin disorders and allergies.

# Toxicological information on ingredients.

## 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Acute toxicity - oral

**Notes (oral LD₅o)** Acute Tox. 4 - H302 Harmful if swallowed.

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Notes (dermal LD50) Acute Tox. 4 - H312 Harmful in contact with skin.

ATE dermal (mg/kg) 1,100.0

Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Skin Corr. 1B - H314 Causes severe burns.

Serious eye damage/irritation

Serious eye Eye Dam. 1 - H318 Corrosive to skin. Corrosivity to eyes is assumed.

damage/irritation

Respiratory sensitisation

**Respiratory sensitisation** Based on available data the classification criteria are not met.

Skin sensitisation

**Skin sensitisation** May cause skin sensitisation or allergic reactions in sensitive individuals.

Germ cell mutagenicity

**Genotoxicity - in vitro**Based on available data the classification criteria are not met.

Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

IARC carcinogenicity None of the ingredients are listed or exempt.

# Epoxy Resin ER2220, Part B

Reproductive toxicity

Reproductive toxicity -

fertility

Based on available data the classification criteria are not met.

Reproductive toxicity -

development

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

General information The severity of the symptoms described will vary dependent on the concentration

and the length of exposure.

Inhalation Corrosive to the respiratory tract. Symptoms following overexposure may include

the following: Severe irritation of nose and throat.

Ingestion May cause sensitisation or allergic reactions in sensitive individuals. May cause

chemical burns in mouth, oesophagus and stomach. Symptoms following

overexposure may include the following: Severe stomach pain. Nausea, vomiting.

**Skin contact** May cause skin sensitisation or allergic reactions in sensitive individuals. Causes

severe burns. Symptoms following overexposure may include the following: Pain or

irritation. Redness. Blistering may occur.

Eye contact Causes serious eye damage. Symptoms following overexposure may include the

following: Pain. Profuse watering of the eyes. Redness.

Route of exposure Ingestion Inhalation Skin and/or eye contact

**Target organs** No specific target organs known.

**Medical considerations** Skin disorders and allergies.

salicylic acid

Acute toxicity - oral

Acute toxicity oral (LD50

mg/kg)

890.0

**Species** Rat

Notes (oral LD<sub>50</sub>) Acute Tox. 4 - H302 Harmful if swallowed.

**ATE oral (mg/kg)** 890.0

Acute toxicity - dermal

Notes (dermal LD₅o) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) Based on available data the classification criteria are not met.

Skin corrosion/irritation

# Epoxy Resin ER2220, Part B

Animal data Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye

Eye Dam. 1 - H318 Causes serious eye damage.

Respiratory sensitisation

damage/irritation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

**Skin sensitisation** Based on available data the classification criteria are not met.

Germ cell mutagenicity

**Genotoxicity - in vitro**Based on available data the classification criteria are not met.

Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

**IARC carcinogenicity**None of the ingredients are listed or exempt.

Reproductive toxicity

Reproductive toxicity -

fertility

Based on available data the classification criteria are not met.

Reproductive toxicity -

development

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

**Aspiration hazard** 

Aspiration hazard Not relevant. Solid.

General information

The severity of the symptoms described will vary dependent on the concentration

and the length of exposure.

**Inhalation** No specific symptoms known.

**Ingestion** May cause discomfort if swallowed. Stomach pain. Nausea, vomiting.

**Skin contact** Prolonged contact may cause dryness of the skin.

Eye contact Causes serious eye damage. Symptoms following overexposure may include the

following: Pain. Profuse watering of the eyes. Redness.

Route of exposure Ingestion Inhalation Skin and/or eye contact

**Target organs** No specific target organs known.

xylene

Acute toxicity - oral

Notes (oral LD<sub>50</sub>) Based on available data the classification criteria are not met.

Acute toxicity - dermal

# Epoxy Resin ER2220, Part B

Notes (dermal LD<sub>50</sub>) Acute Tox. 4 - H312 Harmful in contact with skin.

ATE dermal (mg/kg) 1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l)

.

Notes (inhalation LC50)

Acute Tox. 4 - H332 Harmful if inhaled.

ATE inhalation (vapours

27.571

27.571

mg/l)

Skin corrosion/irritation

Animal data Irritating.

Serious eye damage/irritation

Serious eve

Based on available data the classification criteria are not met.

damage/irritation

Respiratory sensitisation
Respiratory sensitisation

Based on available data the classification criteria are not met.

Skin sensitisation

**Skin sensitisation** Based on available data the classification criteria are not met.

Germ cell mutagenicity

**Genotoxicity - in vitro**Based on available data the classification criteria are not met.

Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

**IARC carcinogenicity**None of the ingredients are listed or exempt.

Reproductive toxicity

Reproductive toxicity -

fertility

Based on available data the classification criteria are not met.

Reproductive toxicity -

development

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

**Aspiration hazard** Based on available data the classification criteria are not met.

General information The severity of the symptoms described will vary dependent on the concentration

and the length of exposure.

**Inhalation** A single exposure may cause the following adverse effects: Headache. Exhaustion

and weakness.

**Ingestion** May cause irritation.

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**Skin contact** Redness. Irritating to skin.

Eye contact No specific symptoms known.

Route of exposure Ingestion Inhalation Skin and/or eye contact

**Target organs** No specific target organs known.

## SECTION 12: Ecological information

## Ecological information on ingredients.

## salicylic acid

**Ecotoxicity** Not regarded as dangerous for the environment. However, large or frequent spills

may have hazardous effects on the environment.

xylene

**Ecotoxicity** Not regarded as dangerous for the environment. However, large or frequent spills

may have hazardous effects on the environment.

12.1. Toxicity

**Toxicity** Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

## 3-aminomethyl-3,5,5-trimethylcyclohexylamine

**Toxicity** Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

salicylic acid

**Toxicity** Based on available data the classification criteria are not met.

xylene

**Toxicity** Based on available data the classification criteria are not met.

## 12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Ecological information on ingredients.

# 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Persistence and degradability

The degradability of the product is not known.

salicylic acid

Persistence and degradability

The degradability of the product is not known.

xylene

Persistence and degradability

The degradability of the product is not known.

## 12.3. Bioaccumulative potential

# Epoxy Resin ER2220, Part B

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

Ecological information on ingredients.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Bioaccumulative potential No data available on bioaccumulation.

salicylic acid

Bioaccumulative potential No data available on bioaccumulation.

xylene

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

Mobility No data available.

Ecological information on ingredients.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Mobility No data available.

salicylic acid

Mobility No data available.

xylene

**Mobility** No data available.

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

Other adverse effects None known.

Ecological information on ingredients.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Other adverse effects None known.

salicylic acid

Other adverse effects None known.

xylene

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

# Epoxy Resin ER2220, Part B

#### General information

The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

#### Disposal methods

Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

## **SECTION 14: Transport information**

General For limited quantity packaging/limited load information, consult the relevant modal

documentation using the data shown in this section.

## 14.1. UN number

UN No. (ADR/RID) 1760
UN No. (IMDG) 1760
UN No. (ICAO) 1760
UN No. (ADN) 1760

# 14.2. UN proper shipping name

Proper shipping name (ADR/RID)

 ${\tt CORROSIVE\ LIQUID,\ N.O.S.\ (CONTAINS\ 3-aminomethyl-3,5,5-trimethylcyclohexylamine\ )}$ 

Proper shipping name (IMDG) CORROSIVE LIQUID, N.O.S. (CONTAINS 3-aminomethyl-3,5,5-trimethylcyclohexylamine)

Proper shipping name (ICAO) CORROSIVE LIQUID, N.O.S. (CONTAINS 3-aminomethyl-3,5,5-trimethylcyclohexylamine)

Proper shipping name (ADN) CORROSIVE LIQUID, N.O.S. (CONTAINS 3-aminomethyl-3,5,5-trimethylcyclohexylamine)

## 14.3. Transport hazard class(es)

ADR/RID class 8

ADR/RID classification code C9

ADR/RID label 8

IMDG class 8

ICAO class/division 8

ADN class 8

## Transport labels



## 14.4. Packing group

ADR/RID packing group II

IMDG packing group II

# Epoxy Resin ER2220, Part B

ICAO packing group II
ADN packing group III

## 14.5. Environmental hazards

## Environmentally hazardous substance/marine pollutant

No.

# 14.6. Special precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS F-A, S-B

ADR transport category 2

Emergency Action Code 2X

Hazard Identification Number 80

(ADR/RID)

Tunnel restriction code (E)

## 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

## SECTION 15: Regulatory information

## 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations Health and Safety at Work etc. Act 1974 (as amended).

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment

Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

EH40/2005 Workplace exposure limits.

**EU legislation** Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18

December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

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.

## Inventories

#### **EU - EINECS/ELINCS**

None of the ingredients are listed or exempt.

## SECTION 16: Other information

# Epoxy Resin ER2220, Part B

Abbreviations and acronyms used in the safety data sheet

ADR: European Agreement concerning the International Carriage of Dangerous Goods by

Road.

ADN: European Agreement concerning the International Carriage of Dangerous Goods by

Inland Waterways.

RID: European Agreement concerning the International Carriage of Dangerous Goods by

Rail.

IATA: International Air Transport Association.

ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Dangerous Goods.

CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate.

LC₅o: Lethal Concentration to 50 % of a test population.

LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).

EC50: 50% of maximal Effective Concentration.

PBT: Persistent, Bioaccumulative and Toxic substance.

vPvB: Very Persistent and Very Bioaccumulative.

Classification abbreviations

and acronyms

Acute Tox. = Acute toxicity

Eye Dam. = Serious eye damage

Skin Corr. = Skin corrosion Skin Sens. = Skin sensitisation

Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Classification procedures according to Regulation (EC)

1272/2008

Acute Tox. 4 - H312: Acute Tox. 4 - H302: Eye Dam. 1 - H318: Skin Corr. 1B - H314: Skin

Sens. 1 - H317: : Calculation method. Aquatic Chronic 3 - H412: : Calculation method.

Training advice Read and follow manufacturer's recommendations. Only trained personnel should use this

material.

**Issued by** Bethan Massey

Revision date 22/08/2018

Revision 1

SDS number 1703

Hazard statements in full H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

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.

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.