

SAFETY DATA SHEET

FLAME RETARDANT EPOXY ER2188 PART B

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name FLAME RETARDANT EPOXY ER2188 PART B
Product No. ER2188B, EER2188BB5K, EER2188K1K, EER2188K5K, EER2188K25K, EER2188RP50G, EER2188RP100G, EER2188100GF, EER2188RP250G, EER2188RP250GE, EER2188RP250GF, EER2188RP500G, EER2188RP500GF, EER2188RP1000G, EER21881000GF, EER2188K10K, ZE

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

Identified uses Resin.
Uses advised against At this moment in time we do not have information on use restrictions. They will be included in this safety data sheet when available

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

+44 (0)1530 419600 between 8.30am - 5.00pm GMT Mon – Fri

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Acute Tox. 4 - H302; Acute Tox. 4 - H312; Skin Corr. 1B - H314; Skin Sens. 1 - H317; Repr. 2 - H361fd
Environment	Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410

Classification (1999/45/EEC)

Xn; R21/22. Repr. Cat. 3; R62, R63. C; R34. R43. N; R50/53.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Environment

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Dispose of waste and residues in accordance with local authority requirements.

2.2. Label elements

Contains ISOPHORONEDIAMINE
 NONYLPHENOL
 TRIMETHYLHEXAMETHYLENE DIAMINE
 TETRADECYLAMINE

Label In Accordance With (EC) No. 1272/2008

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Signal Word	Danger	
Hazard Statements	H302 H312 H314 H317 H361fd H410	Harmful if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child. Very toxic to aquatic life with long lasting effects.
Precautionary Statements	P280 P313 P305+351+338	Wear protective gloves, eye and face protection. Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplementary Precautionary Statements	P260 P301+312 P333+313	Do not breathe vapour/spray. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

ISOPHORONEDIAMINE	30-60%
CAS-No.: 2855-13-2	EC No.: 220-666-8
Classification (EC 1272/2008) Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412	Classification (67/548/EEC) C;R34 Xn;R21/22 R43 R52/53
NONYLPHENOL	10-30%
CAS-No.: 25154-52-3	EC No.: 246-672-0
Classification (EC 1272/2008) Acute Tox. 4 - H302 Skin Corr. 1B - H314 Repr. 2 - H361fd Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC) Repr. Cat. 3;R62,R63 C;R34 Xn;R22 N;R50/53

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TRIMETHYLHEXAMETHYLENE DIAMINE		10-30%
CAS-No.: 25620-58-0	EC No.: 247-134-8	
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Xn;R22. C;R34. R43,R52/53.	
TETRADECYLAMINE		5-10%
CAS-No.: 61788-46-3	EC No.: 262-977-1	
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Xn;R22. C;R35. N;R50.	
Salicylic acid		1-5%
CAS-No.: 69-72-7	EC No.: 200-712-3	
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Xn;R22. Xi;R36.	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition Comments

Ingredients not listed are classified as non-hazardous or at a concentration below reportable levels.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Get medical attention. Provide rest, warmth and fresh air.

Ingestion

DO NOT INDUCE VOMITING! Rinse mouth thoroughly. Drink plenty of water. Get medical attention immediately!

Skin contact

Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention immediately. Continue to rinse.

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

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

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use fire-extinguishing media appropriate for surrounding materials. Fire can be extinguished using: Water spray. Foam. Alcohol resistant foam. Carbon dioxide (CO2).

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

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Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

Specific hazards

Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂). Ammonia or amines. Nitrous gases (NO_x).

5.3. Advice for firefighters

Special Fire Fighting Procedures

Avoid breathing fire vapours. Move container from fire area if it can be done without risk.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

DO NOT touch spilled material. Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer. Clean-up personnel should use respiratory and/or liquid contact protection.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards. The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. See section 12 as well. Collect and dispose of spillage as indicated in section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Avoid inhalation of vapours.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

Storage Class

Corrosive storage.

7.3. 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

8.2. Exposure controls

Protective equipment



Process conditions

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station.

Engineering measures

Provide sufficient ventilation during operations which cause vapour formation. Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

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Respiratory equipment

Respiratory protection must be used if air contamination exceeds acceptable level. It is recommended to use respiratory equipment with combination filter, type A2/P2. EN14387 When spraying use suitable air-supplied respirator.

Hand protection

Use protective gloves made of: Rubber, neoprene or PVC. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Gloves should conform to EN374

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable. EN166

Other Protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Brown.
Odour	Characteristic.
Solubility	Slightly soluble in water.
Relative density	0.920 @ 20 C (68 F)
Viscosity	200 cP @ 23 C (73 F)

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Not available.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid contact with strong oxidisers.

10.5. Incompatible materials

Materials To Avoid

Strong acids. Strong alkalis. Strong oxidising substances.

10.6. Hazardous decomposition products

Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂). Ammonia or amines.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation

Harmful by inhalation. Irritating to respiratory system.

Ingestion

Harmful if swallowed.

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Skin contact

Causes burns. May cause sensitisation by skin contact. Product has a defatting effect on skin. Prolonged contact may cause dryness of the skin. May cause allergic contact eczema.

Eye contact

Spray and vapour in the eyes may cause irritation and smarting. May cause chemical eye burns.

Health Warnings

Prolonged inhalation of high concentrations may damage respiratory system.

Toxicological information on ingredients.

TRIMETHYLHEXAMETHYLENE DIAMINE (CAS: 25620-58-0)

Toxic Dose 1 - LD 50

910 mg/kg (oral rat)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Dangerous for the environment if discharged into watercourses.

12.1. Toxicity

Ecological information on ingredients.

TRIMETHYLHEXAMETHYLENE DIAMINE (CAS: 25620-58-0)

EC 50, 48 Hrs, Daphnia, mg/l

31.5

IC 50, 72 Hrs, Algae, mg/l

29.5

12.2. Persistence and degradability

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

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

General

For US Domestic transportation this product is classified as a Consumer Commodity. For International transportation this product is classified as UN2735 AMINES, LIQUID, CORROSIVE, N.O.S., OR POLYAMINES, LIQUID, CORROSIVE, N.O.S.

14.1. UN number

UN No. (ADR/RID/ADN) 2735

UN No. (IMDG) 1760

UN No. (ICAO) 1760

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14.2. UN proper shipping name

Proper Shipping Name CORROSIVE LIQUID, N.O.S. (ISOPHORONEDIAMINE, NONYLPHENOL)

14.3. Transport hazard class(es)

ADR/RID/ADN Class 8
ADR/RID/ADN Class Class 8: Corrosive substances.
ADR Label No. 8
IMDG Class 8
ICAO Class/Division 8
Transport Labels



14.4. Packing group

ADR/RID/ADN Packing group III
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-B
Emergency Action Code 2X
Hazard No. (ADR) 80
Tunnel Restriction Code (E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 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

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

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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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Issued By	Helen O'Reilly
Revision Date	APRIL 2013
Revision	6
SDS No.	10668
Risk Phrases In Full	
R34	Causes burns.
R35	Causes severe burns.
R22	Harmful if swallowed.
R21/22	Harmful in contact with skin and if swallowed.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R36	Irritating to eyes.
R43	May cause sensitisation by skin contact.
R63	Possible risk of harm to the unborn child.
R62	Possible risk of impaired fertility.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R50	Very toxic to aquatic organisms.
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.
H361fd	Suspected of damaging fertility or 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.

Disclaimer

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.