

SAFETY DATA SHEET

ER2221A PART A

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

1.1. Product identifier

Product name ER2221A PART A

Product number ER2221A,EER2221RP250G,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
 info@hkw.co.uk
 +44 (0)1530 419600
 +44 (0)1530 416640

1.4. Emergency telephone number

Emergency telephone +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

Physical hazards Not Classified

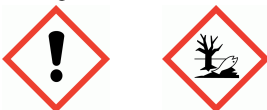
Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

Classification (67/548/EEC or 1999/45/EC) Xi;R36/38. R43. N;R50/53.

2.2. Label elements

Pictogram



Signal word Warning

Hazard statements H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H411 Toxic to aquatic life with long lasting effects.

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Precautionary statements

P261 Avoid breathing vapour/spray.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Contains EPOXY RESIN (Number average MW <= 700), NEOPENTYL GLYCOL DIGLYCIDYL ETHER

Supplementary precautionary statements 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

ZINC OXIDE 10-30%		
CAS number: 1314-13-2	EC number: 215-222-5	REACH registration number: 01-2119463881-32-XXXX
M factor (Acute) = 1	M factor (Chronic) = 1	
Classification Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC or 1999/45/EC) N;R50/53	
EPOXY RESIN (Number average MW <= 700) 10-30%		
CAS number: 25068-38-6	EC number: 500-033-5	REACH registration number: 01-2119456619-26-XXXX
Classification Eye Irrit. 2 - H319 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	Classification (67/548/EEC or 1999/45/EC) R43 Xi;R36/38 N;R51/53	
NEOPENTYL GLYCOL DIGLYCIDYL ETHER 10-30%		
CAS number: 17557-23-2	EC number: 241-536-7	
Classification Skin Irrit. 2 - H315 Skin Sens. 1 - H317	Classification (67/548/EEC or 1999/45/EC) Xi;R38. R43.	

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

Composition comments No classified ingredients, or those having occupational exposure limits, present above the levels of disclosure.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Treat symptomatically.

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Inhalation	Move affected person to fresh air at once.
Ingestion	Do not induce vomiting. Get medical attention immediately. Rinse nose, mouth and throat with water.
Skin contact	Remove affected person from source of contamination. Rinse immediately with plenty of water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse with water. Continue to rinse for at least 15 minutes and get medical attention.

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

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with the following media: Foam. Alcohol-resistant foam. Dry chemicals, sand, dolomite etc.

5.2. Special hazards arising from the substance or mixture

Specific hazards No unusual fire or explosion hazards noted.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours. Oxides of carbon.

5.3. Advice for firefighters

Protective actions during firefighting Use water to keep fire exposed containers cool and disperse vapours.

Special protective equipment for firefighters 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 Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Keep combustible materials away from spillage. Stop leak if safe to do so. Do not touch or walk into spilled material. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb in vermiculite, dry sand or earth and place into containers. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

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 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Usage precautions Avoid spilling. Avoid contact with skin and eyes. Keep away from heat, sparks and open flame.

7.2. Conditions for safe storage, including any incompatibilities

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

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

ZINC OXIDE

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³

Short-term exposure limit (15-minute): WEL 10 mg/m³

WEL = Workplace Exposure Limit

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

Wear protective gloves made of the following material: Rubber (natural, latex). Neoprene. Polyvinyl chloride (PVC). 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.

Other skin and body protection

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

Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Respiratory protection

Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. When spraying, wear a suitable supplied-air respirator. Combination filter, type A2/P2. 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. Liquid.

ER2221A PART A

Colour	Grey.
Relative density	2.44 @ 20°C/68°F
Solubility(ies)	Insoluble in water.
Viscosity	76000 mPa s @ 20°C/68°F

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not available. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid contact with the following materials: Acids. Oxidising agents.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrous gases (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation	May cause respiratory system irritation.
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting.
Skin contact	Irritating to skin. May cause sensitisation by skin contact. May cause allergic contact eczema. Prolonged contact may cause dryness of the skin. Product has a defatting effect on skin. Repeated exposure may cause skin dryness or cracking. May cause allergic contact eczema.
Eye contact	Irritating to eyes. May cause chemical eye burns.
Acute and chronic health hazards	The product contains an epoxy resin. May cause sensitisation or allergic reactions in sensitive individuals.
Route of entry	Inhalation Ingestion. Skin and/or eye contact

SECTION 12: Ecological Information

Ecotoxicity Dangerous for the environment if discharged into watercourses.

12.1. Toxicity

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

ER2221A PART A

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General As supplied, this product is consigned under the Limited Quantities provisions.

14.1. UN number

UN No. (ADR/RID) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINC OXIDE, EPOXY RESIN (Number average MW <= 700))

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINC OXIDE, EPOXY RESIN (Number average MW <= 700))

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINC OXIDE, EPOXY RESIN (Number average MW <= 700))

Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINC OXIDE, EPOXY RESIN (Number average MW <= 700))

14.3. Transport hazard class(es)

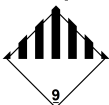
ADR/RID class 9

ADR/RID label 9

IMDG class 9

ICAO class/division 9

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ER2221A PART A

ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS F-A, S-F

Emergency Action Code •3Z

Hazard Identification Number 90
(ADR/RID)

Tunnel restriction code (E)

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

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).
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 (as amended). 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). 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). Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.
Guidance	Workplace Exposure Limits EH40.
Authorisations (Title VII Regulation 1907/2006)	No specific authorisations are known for this product.
Restrictions (Title VIII Regulation 1907/2006)	No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

ER2221A PART A

Issued by	Toni Ashford
Revision date	02/11/2015
Revision	2
SDS number	20767
Risk phrases in full	R36/38 Irritating to eyes and skin. R38 Irritating to skin. R43 May cause sensitisation by skin contact. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Hazard statements in full	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic 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.

SAFETY DATA SHEET

ER2221B PART B

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

1.1. Product identifier

Product name ER2221B PART B

Product number ER2221B,EER2221RP250G,EER2221K5K,ZE

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

Identified uses Resin.

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

1.4. Emergency telephone number

Emergency telephone +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

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT SE 2 - H371

Environmental hazards Aquatic Chronic 2 - H411

Classification (67/548/EEC or 1999/45/EC) Xn;R21/22. C;R34. Xi;R37. R43. R52/53.

2.2. Label elements

Pictogram



Signal word

Danger

Hazard statements

H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H371 May cause damage to organs .
 H411 Toxic to aquatic life with long lasting effects.

ER2221B PART B

Precautionary statements	<p>P260 Do not breathe vapour/spray.</p> <p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/attention.</p> <p>P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.</p>
Contains	3-AMINOPHENYL SULFONE, ISOPHORONEDIAMINE, CYCLOHEXANOL-DIMETHYLAMINE

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

3-AMINOPHENYL SULFONE	60-100%
CAS number: 599-61-1 EC number: 209-967-5 REACH registration number: 01-2119957312-40-XXXX	
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 2 - H371 Aquatic Chronic 2 - H411	Classification (67/548/EEC or 1999/45/EC) Xi;R36/37/38.
ISOPHORONEDIAMINE	30-60%
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	Classification (67/548/EEC or 1999/45/EC) C;R34 Xn;R21/22 R43 R52/53
CYCLOHEXANOL-DIMETHYLAMINE	5-10%
CAS number: 2579-20-6 EC number: 219-941-5 REACH registration number: 01-2119957312-40-XXXX	
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Skin Sens. 1 - H317 Eye Dam. 1 - H318 Aquatic Chronic 3 - H412	Classification (67/548/EEC or 1999/45/EC) Xn;R22. C;R34. R43.

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XYLENE		<1%
CAS number: 1330-20-7		EC number: 215-535-7
Classification	Classification (67/548/EEC or 1999/45/EC)	
Flam. Liq. 3 - H226	R10 Xn;R20/21 Xi;R38	
Acute Tox. 4 - H312		
Acute Tox. 4 - H332		
Skin Irrit. 2 - H315		

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

Composition comments No classified ingredients, or those having occupational exposure limits, present above the levels of disclosure.

SECTION 4: First aid measures**4.1. Description of first aid measures**

Inhalation	Move affected person to fresh air at once. Get medical attention. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention immediately.
Skin contact	Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse with water. Continue to rinse for at least 15 minutes. Get medical attention immediately.

4.2. Most important symptoms and effects, both acute and delayed**4.3. Indication of any immediate medical attention and special treatment needed****SECTION 5: Firefighting measures****5.1. Extinguishing media**

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire. Extinguish with the following media: Water spray. Foam. Alcohol-resistant foam. Carbon dioxide (CO₂).

5.2. Special hazards arising from the substance or mixture

Specific hazards Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO₂). Ammonia or amines. Nitrous gases (NO_x).

5.3. Advice for firefighters**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****6.2. Environmental precautions****6.3. Methods and material for containment and cleaning up**

Methods for cleaning up Do not touch or walk into spilled material. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate.

6.4. Reference to other sections**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

ER2221B PART B

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Avoid inhalation of vapours.

7.2. Conditions for safe storage, including any incompatibilities

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

Storage class Corrosive storage.

7.3. Specific end use(s)

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

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

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. It is recommended that gloves are made of the following material: Nitrile rubber. To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body 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 and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P3. 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 Liquid.

ER2221B PART B

Colour	Amber.
Odour	Characteristic.
Relative density	1.02 @ 20°C/68°F
Viscosity	250 mPa s @ 20°C/68°F

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO₂). Ammonia or amines.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 608.28328284

Acute toxicity - dermal

ATE dermal (mg/kg) 4,565.66989792

Inhalation Harmful by inhalation. Irritating to respiratory system.

Ingestion Harmful if swallowed.

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 Vapour or spray in the eyes may cause irritation and smarting. May cause chemical eye burns.

Acute and chronic health hazards Prolonged inhalation of high concentrations may damage respiratory system.

SECTION 12: Ecological Information

Ecotoxicity Dangerous for the environment if discharged into watercourses.

12.1. Toxicity

Acute toxicity - fish LC₅₀, 96 hours: 110 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 44 mg/l, Daphnia magna

Acute toxicity - aquatic plants IC₅₀, 72 hours: 37 mg/l, Algae

12.2. Persistence and degradability

12.3. Bioaccumulative potential

ER2221B PART B

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General As supplied, this product is consigned under the Limited Quantities provisions.

14.1. UN number

UN No. (ADR/RID) 2735

UN No. (IMDG) 2735

UN No. (ICAO) 2735

14.2. UN proper shipping name

Proper shipping name (ADR/RID) AMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINE,CYCLOHEXANOL-DIMETHYLAMINE)

Proper shipping name (IMDG) AMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINE,CYCLOHEXANOL-DIMETHYLAMINE)

Proper shipping name (ICAO) AMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINE,CYCLOHEXANOL-DIMETHYLAMINE)

Proper shipping name (ADN) AMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINE,CYCLOHEXANOL-DIMETHYLAMINE)

14.3. Transport hazard class(es)

ADR/RID class 8

ADR/RID label 8

IMDG class 8

ICAO class/division 8

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

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EmS	F-A, S-B
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).
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 (as amended). 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). 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). Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.
Guidance	Workplace Exposure Limits EH40.

15.2. Chemical safety assessment**SECTION 16: Other information**

Issued by	Toni Ashford
Revision date	02/11/2015
Revision	2
SDS number	20769
Risk phrases in full	R21/22 Harmful in contact with skin and if swallowed. R22 Harmful if swallowed. R34 Causes burns. R36/37/38 Irritating to eyes, respiratory system and skin. R37 Irritating to respiratory system. R43 May cause sensitisation by skin contact. R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

ER2221B PART B**Hazard statements in full**

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H371 May cause damage to organs .
H371 May cause damage to organs .
H411 Toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
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.