Revision Date: 14/08/2012

Revision: 3



SAFETY DATA SHEET FOSROC PRIMER MS2 PART A

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

1.1. Product identifier

Product Name FOSROC PRIMER MS2 PART A

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

1.3. Details of the supplier of the safety data sheet

Supplier: FOSROC Limited

Drayton Manor Business Park

Coleshill Road Tamworth Staffordshire B78 3TI

Tel. +44 (0) 1827 262222 Fax. +44 (0) 1827 262444 enquiryuk@fosroc.com

1.4. Emergency telephone number

+44 (0) 1827 265 279 (08.30 to 17.00hrs Mon - Thu; 08.30 to 16.00hrs Fri)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

<u>Classification (1999/45/EEC)</u> Xi;R36/38. R43. N;R51/53. R10, R67.

Human Health

In high concentrations, vapours and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. Prolonged skin contact may cause redness and irritation. May cause allergic skin disorders in sensitive individuals. The product contains a small amount of sensitising substance which may provoke an allergic reaction among sensitive individuals in contact with skin. The product is irritating to eyes and skin.

Environment

The product contains a substance which is toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

Physical And Chemical Hazards

The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures.

2.2. Label elements

Contains: EPOXY NOVOLAC RESIN

Labelling



Irritant



Dangerous for the environment

Risk Phrases

R10 Flammable.

R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

R67 Vapours may cause drowsiness and dizziness.

Safety Phrases

S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

S37 Wear suitable gloves.

S51 Use only in well-ventilated areas.

S57 Use appropriate containment to avoid environmental contamination.

S60 This material and its container must be disposed of as hazardous waste.

S61 Avoid release to the environment. Refer to special instructions/safety data

sheets.

P5 Contains epoxy constituents. See information supplied by the manufacturer.

2.3. Other hazards

None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

EPOXY NOVOLAC RESIN 60-100%

CAS-No.: 28064-14-4 EC No.:

Classification (EC 1272/2008) Classification (67/548/EEC)

Skin Irrit. 2 - H315 Not classified. Eye Irrit. 2 - H319 Skin Sens. 1 - H317

BUTANOL-norm 5-10%

CAS-No.: 71-36-3 EC No.: 200-751-6

Classification (EC 1272/2008) Classification (67/548/EEC)

 Flam. Liq. 3 - H226
 R10

 Acute Tox. 4 - H302
 Xn;R22

 Skin Irrit. 2 - H315
 Xi;R37/38,R41

Eye Dam. 1 - H318 R67

STOT Single 3 - H335 STOT Single 3 - H336

Aquatic Chronic 2 - H411

SOLVENT NAPHTHA 5-10%

CAS-No.: 64742-95-6 EC No.: 265-199-0

Classification (EC 1272/2008) Classification (67/548/EEC)

Flam. Liq. 3 - H226 Xn;R65.
EUH066 Xi;R37.
STOT Single 3 - H335, H336 N;R51/53.
Asp. Tox. 1 - H304 R10,R66,R67.
Aquatic Chronic 2 - H411

1-METHOXY-2-PROPANOL 1-5%

CAS-No.: 107-98-2 EC No.: 203-539-1

Classification (EC 1272/2008) Classification (67/548/EEC)

 Flam. Liq. 3 - H226
 R10

 STOT Single 3 - H336
 R67

1,2,4-TRIMETHYLBENZENE			1-5%
CAS-No.: 95-63-6	EC No.: 202-436-9		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Flam. Liq. 3 - H226		R10	
Acute Tox. 4 - H332		Xn;R20	
Skin Irrit. 2 - H315		Xi;R36/37/38	
Eye Irrit. 2 - H319		N;R51/53	
STOT Single 3 - H335			
Aquatic Chronic 2 - H411			

MESITYLENE		1-5%
CAS-No.: 108-67-8	EC No.: 203-604-4	
Classification (EC 1272/2008)	Classification (67/548/EEC)	
Flam. Liq. 3 - H226	R10	
STOT Single 3 - H335	Xi;R37	
Aquatic Chronic 2 - H411	N;R51/53	

CAS-No.: 1330-20-7	EC No.: 215-535-7		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Flam. Liq. 3 - H226		R10	
Acute Tox. 4 - H312		Xn;R20/21	
Acute Tox. 4 - H332		Xi;R38	
Skin Irrit. 2 - H315			

< 1%

CUMENE			< 1%
CAS-No.: 98-82-8	EC No.: 202-704-5		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Flam. Liq. 3 - H226		R10	
STOT Single 3 - H335		Xn;R65	
Asp. Tox. 1 - H304		Xi;R37	
Aquatic Chronic 2 - H411		N;R51/53	

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

Composition Comments

XYLENE

The data shown are in accordance with the latest EC Directives.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Information

General first aid, rest, warmth and fresh air. Do not give victim anything to drink if they are unconscious. Get medical attention if any discomfort continues.

Inhalation.

Place unconscious person on the side in the recovery position and ensure breathing If respiratory problems, artificial respiration/oxygen. Get medical attention if any discomfort continues.

Ingestion

Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and bring along these instructions.

Skin Contact

Immediately remove contaminated clothing. Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water.

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 promptly if symptoms occur after washing.

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

General Information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation.

Vapours may cause headache, fatigue, dizziness and nausea. Upper respiratory irritation.

Ingestion

May cause discomfort if swallowed.

Skin Contact

May cause skin irritation/eczema.

Eve Contact

Irritation of eyes and mucous membranes.

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing Media

Fire can be extinguished using: Water spray, fog or mist. Foam, carbon dioxide or dry powder. Dry chemicals, sand, dolomite etc.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

Fire causes formation of toxic gases.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Use pressurised air mask if product is involved in a fire. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

Protective Measures In Fire

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 onto the ground or into water courses. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container.

6.3. Methods and material for containment and cleaning up

Keep combustibles away from spilled material. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

7.2. Conditions for safe storage, including any incompatibilities

Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container. Avoid contact with oxidising agents.

Storage Class

Flammable liquid 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

Name	STD	TWA	- 8 Hrs	STEL -	- 15 Min	Notes
1,2,4-TRIMETHYLBENZENE	WEL	25 ppm	125 mg/m3			
1-METHOXY-2-PROPANOL	WEL	100 ppm	375 mg/m3	150 ppm	560 mg/m3	Sk
BUTANOL-norm	WEL			50 ppm	154 mg/m3	Sk
CUMENE	WEL	25 ppm	125 mg/m3	50 ppm	250 mg/m3	Sk
MESITYLENE	WEL	25 ppm	125 mg/m3			
SOLVENT NAPHTHA	WEL	19 ppm				
XYLENE	WEL	50 ppm	220 mg/m3	100 ppm	441 mg/m3	Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

8.2. Exposure controls

Protective Equipment





Process Conditions

Provide eyewash station.

Engineering Measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. All handling to take place in well-ventilated area.

Respiratory Equipment

Wear mask supplied with:

Gas cartridge suitable for organic substances.

Hand Protection

Use protective gloves made of: Neoprene. Nitrile. Rubber (natural, latex).

Eye Protection

Wear splash-proof eye goggles to prevent any possibility of eye contact.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact. Use engineering controls to reduce air contamination to permissible exposure level.

Hygiene Measures

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that 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

AppearanceLiquidColourBrownOdourAromatic.

<u>Solubility</u> Insoluble in water

Initial Boiling Point and Boiling 140 °C

Range:

Relative Density

1.04 at 20°C

Flash Point (°C)

30 °C

Auto Ignition Temperature (°C)

500 °C

9.2. Other information

None.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

No particular stability concerns.

10.3. Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidisers.

10.5. Incompatible materials

Materials To Avoid

Strong acids. Strong oxidising substances.

10.6. Hazardous decomposition products

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

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

General Information

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Inhalation

In high concentrations, vapours may irritate throat and respiratory system and cause coughing. Vapours have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Ingestion.

Gastrointestinal symptoms, including upset stomach.

Skin Contact

Acts as a defatting agent on skin. May cause cracking of skin, and eczema. Irritating to skin. May cause sensitisation by skin contact.

Eye Contact

Irritating to eyes.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

The product contains a substance which is toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.1. Toxicity

Acute Fish Toxicity

The product contains a substance which is toxic to aquatic organisms.

12.2. Persistence and degradability

Degradability

The product contains substances which are not expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative Potential:

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

The product contains volatile substances, which may spread in the atmosphere.

12.5. Results of PBT and vPvB assessment

Assessment not carried out but this product is believed not to be a PBT nor a vPvB.

12.6. Other adverse effects

None known.

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. Make sure containers are empty before discarding (explosion risk). Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

 UN No. (ADR/RID/ADN)
 1993

 UN No. (IMDG)
 1993

 UN No. (ICAO)
 1993

14.2 UN Proper shipping name

Proper Shipping Name FLAMMABLE LIQUID, N.O.S. (BUTANOL-norm, EPOXY NOVOLAC RESIN)

14.3 Transport hazard class(es)

ADR/RID/ADN Class 3

ADR/RID/ADN Class 3: Flammable liquids.

ADR Label No. 3
IMDG Class 3
ICAO Class/Division 3

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-E, S-E

 Emergency Action Code
 •3YE

 Hazard No. (ADR)
 30

 Tunnel Restriction Code
 (D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not relevant.

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).

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations.

Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes

CHIP for everyone HSG(108).

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), 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.

National Regulations

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689. Workplace Exposure Limits 2005 (EH40)

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

General Information

Only trained personnel should use this material.

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date 14/08/2012

Revision 3

Risk Phrases In Full

R10 Flammable.

R20/21 Harmful by inhalation and in contact with skin.

R20 Harmful by inhalation. R22 Harmful if swallowed.

R65 Harmful: may cause lung damage if swallowed.

R36/38 Irritating to eyes and skin.

R36/37/38 Irritating to eyes, respiratory system and skin.
R37/38 Irritating to respiratory system and skin.

R37 Irritating to respiratory system.

R38 Irritating to skin.

R43 May cause sensitisation by skin contact.

R66 Repeated exposure may cause skin dryness or cracking.

R41 Risk of serious damage to eyes.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R67 Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

H318 Causes serious eye damage. H319 Causes serious eye irritation.

H315 Causes skin irritation.

H226 Flammable liquid and vapour.

H332 Harmful if inhaled.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.
 H336 May cause drowsiness or dizziness.
 H335 May cause respiratory irritation.

EUH066 Repeated exposure may cause skin dryness or cracking.

H411 Toxic to aquatic life with long lasting effects.

Disclaimer

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

Revision Date: 14/08/2012

Revision: 3



SAFETY DATA SHEET FOSROC PRIMER MS2 PART B

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

1.1. Product identifier

Product Name FOSROC PRIMER MS2 PART B

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

Identified uses Hardener component of two part epoxy system

1.3. Details of the supplier of the safety data sheet

Supplier: FOSROC Limited

Drayton Manor Business Park

Coleshill Road Tamworth Staffordshire B78 3TI

Tel. +44 (0) 1827 262222 Fax. +44 (0) 1827 262444 enquiryuk@fosroc.com

1.4. Emergency telephone number

+44 (0) 1827 265 279 (08.30 to 17.00hrs Mon - Thu; 08.30 to 16.00hrs Fri)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

<u>Classification (1999/45/EEC)</u> Xn;R20/22. C;R34. R52/53.

Human Health

Corrosive. Prolonged contact causes serious eye and tissue damage.

Environment

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

2.2. Label elements

Contains: BENZYL ALCOHOL

 $FORMALDEHYDE, POLYMER\ WITH\ BENZENEAMINE,\ HYDROGENATED$

4,4'-METHYLENEBISCYCLOHEXANAMINE

Labelling





Corrosive

e Har

Risk Phrases

R20/22 Harmful by inhalation and if swallowed.

R34 Causes burns

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

Safety Phrases

S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately

(show label where possible).
Use only in well-ventilated areas.

S60 This material and its container must be disposed of as hazardous waste.

2.3. Other hazards

Acute Tox. 4 - H332

None.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

S51

3.2. Mixtures

BENZYL ALCOHOL			30-60%
CAS-No.: 100-51-6	EC No.: 202-859-9		
Classification (EC 1272/2008) Acute Tox. 4 - H302		ssification (67/548/EEC) R20/22	

FORMALDEHYDE, POLYMER WITH BENZENEAMINE, HYDROGENATED		30-60%
CAS-No.: 135108-88-2	C No.:	
Classification (EC 1272/2008)	Classification (67/548/EEC)	
Acute Tox. 4 - H302	Xn;R22.	
Skin Corr. 1B - H314	C;R34.	

4,4'-METHYLENEBISCYCLOHEXANAMINE			1-5%
CAS-No.: 1761-71-3	EC No.:		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Acute Tox. 4 - H302		Xn;R22.	
Skin Corr. 1A - H314		C;R35.	
Aguatic Chronic 2 - H411		N:R51/53.	

TRIMETHOXY (2,4,4-TRIMETHYL PI	ENTYL)SILANE		1-5%
CAS-No.: 34396-03-7	EC No.: 251-995-5		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Flam. Liq. 3 - H226		R10,R52/53.	
Aquatic Chronic 3 - H412			

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL			1-5%
CAS-No.: 90-72-2	EC No.: 202-013-9		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Acute Tox. 4 - H302		Xn;R22	
Skin Irrit. 2 - H315		Xi;R36/38	
Eye Irrit. 2 - H319			

TETRAETHYL SILICATE			1-5%
CAS-No.: 78-10-4	EC No.: 201-083-8		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Flam. Liq. 3 - H226		R10	
Acute Tox. 4 - H332		Xn;R20	
Eye Irrit. 2 - H319		Xi;R36/37	
STOT Single 3 - H335			

POLYDIMETHYL SILOXANE			1-5%
CAS-No.: 67923-07-3	EC No.:		
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Dam. 1 - H318		Classification (67/548/EEC) Xi;R38,R41.	

METHANOL				< 1%	
CAS-No.: 67-56-1	EC No.: 200-659-6				
Classification (EC 1272/2008)		Classification (67/548/EEC)		+	
Flam. Liq. 2 - H225		F;R11			
Acute Tox. 3 - H301		T;R23/24/25,R39/23/24/25			
Acute Tox. 3 - H311					
Acute Tox. 3 - H331				ı	
STOT Single 1 - H370					

ACETIC ACID%				
CAS-No.: 64-19-7	EC No.: 200-580-7			
Classification (EC 1272/2008)		Classification (67/548/EEC)		
Flam. Liq. 3 - H226 Skin Corr. 1A - H314		R10 C;R35		

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

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. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Ingestion

DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Remove victim immediately from source of exposure. Get medical attention immediately! Provide rest, warmth and fresh air.

Skin Contact

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye Contact

Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

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

General Information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation.

May cause damage to mucous membranes in nose, throat, lungs and bronchial system.

Indestion

May cause chemical burns in mouth and throat.

Skin Contact

Chemical burns.

Eye Contact

Corneal damage

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt. GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing Media

Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Specific Hazards

Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2). Nitrous gases (NOx).

5.3. Advice for firefighters

Special Fire Fighting Procedures

Use supplied air respirator if product is involved in a 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 allow ANY environmental contamination.

6.3. Methods and material for containment and cleaning up

Wear necessary protective equipment. Stop leak if possible without risk. DO NOT touch spilled material! Absorb in vermiculite, dry sand or earth and place into containers. Do not contaminate water sources or sewer.

6.4. Reference to other sections

For personal protection, see section 8.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

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

Name	STD	TWA	- 8 Hrs	STEL - 15 Min		Notes
ACETIC ACID%	WEL		25 mg/m3			
METHANOL	WEL	200 ppm(Sk)	266 mg/m3(Sk)	250 ppm(Sk)	333 mg/m3(Sk)	

WEL = Workplace Exposure Limit.

8.2. Exposure controls

Protective Equipment





Engineering Measures

Provide adequate general and local exhaust ventilation.

Respiratory Equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

Hand Protection

Use protective gloves.

Eye Protection

Use approved safety goggles or face shield.

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 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.

Environmental Exposure Controls

Refer to section 6 or 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Liquid

Colour Straw

Odour Amine.

Solubility Slightly soluble in water.

Initial Boiling Point and Boiling >200 °C

Range:

Flash Point (°C)

9.2. Other information

None.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reaction with: Oxidising materials.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid contact with strong oxidisers.

10.5. Incompatible materials

Materials To Avoid

Reacts violently with strong oxidising substances.

10.6. Hazardous decomposition products

Ammonia or amines.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation

Harmful by inhalation. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.

Inaestion.

Harmful if swallowed. May cause chemical burns in mouth, oesophagus and stomach.

Skin Contact

Causes burns. Harmful in contact with skin.

Eve Contact

Causes burns.

Target Organs

Skin Eyes Respiratory system, lungs

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

12.1. Toxicity

Acute Fish Toxicity

May cause long-term aderse effects in the aguatic environment.

12.2. Persistence and degradability

Degradability:

The product is not expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative Potential:

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

The product has poor water-solubility.

12.5. Results of PBT and vPvB assessment

Assessment not carried out but this product is believed not to be a PBT nor a vPvB.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

General Information

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

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

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

<u>UN No. (ADR/RID/ADN)</u> 1760 <u>UN No. (IMDG)</u> 1760

UN No. (ICAO) 1760

14.2 UN Proper shipping name

Proper Shipping Name CORROSIVE LIQUID, N.O.S. (FORMALDEHYDE, POLYMER WITH BENZENEAMINE,

HYDROGENATED, 4, 4'-METHYLENEBISCYCLOHEXANAMINE)

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

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

No.

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

Not relevant.

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).

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes

Workplace Exposure Limits EH40.

Introduction to Local Exhaust Ventilation HS(G)37.

CHIP for everyone HSG(108).

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), 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.

National Regulations

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689. Workplace Exposure Limits 2005 (EH40)

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

General Information

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date 14/08/2012

Revision 3

Risk Phrases In Full

R34 Causes burns.
R35 Causes severe burns.

R10 Flammable.

R20/22 Harmful by inhalation and if swallowed.

R20 Harmful by inhalation.
R22 Harmful if swallowed.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R11 Highly flammable.

R36/37 Irritating to eyes and respiratory system.

R36/38 Irritating to eyes and skin.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

Hazard Statements In Full

H370 Causes damage to organs << Organs>>.

H318 Causes serious eye damage. H319 Causes serious eye irritation.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H226 Flammable liquid and vapour.

H332 Harmful if inhaled.
H302 Harmful if swallowed.

H412 Harmful to aquatic life with long lasting effects.

H225 Highly flammable liquid and vapour.H335 May cause respiratory irritation.

H331 Toxic if inhaled.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.

H411 Toxic to aquatic life with long lasting effects.

Disclaimer

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.