SAFETY DATA SHEET
FOSROC PRIMER 20

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

1.1. Product identifier

Product name FOSROC PRIMER 20

Product No. 2105006UK9

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

Identified uses Primer.

1.3. Details of the supplier of the safety data sheet

Supplier

FOSROC Limited
Drayton Manor Business Park
Coleshill Road
Tamworth
Staffordshire
B78 3XN
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

Classification (1999/45/EEC) Xn;R20/21, R48/20. Carc. Cat. 3;R40. R42/43. Xi;R36/37/38. R10, R52/53.

Human health

The product is irritating to eyes and skin. Harmful by inhalation. May cause sensitisation by skin contact. Contains a substance which may be potentially carcinogenic.

Environment

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

Physical and Chemical Hazards

Heating will generate vapours which may form explosive vapour/air mixtures.

2.2. Label elements

Contains

XYLENE
AROMATIC POLYISOCYANATE PREPOLYMER
DIPHENYLMETHANE-4,4'-DI-ISOCYANATE
OLIGOMERIC MDI
DIPHENYLMETHANE-2,4'-DI-ISOCYANATE
DIPHENYLMETHANE-2,2'-DI-ISOCYANATE

Labelling

Harmful

Risk Phrases

R10	Flammable.
R20/21	Harmful by inhalation and in contact with skin.
R36/37/38	Irritating to eyes, respiratory system and skin.
R40	Limited evidence of a carcinogenic effect.
R42/43	May cause sensitisation by inhalation and skin contact.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases

S23	Do not breathe vapour/spray.
S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37	Wear suitable protective clothing and gloves.
S38	In case of insufficient ventilation, wear suitable respiratory equipment.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S60	This material and its container must be disposed of as hazardous waste.
P4	Contains isocyanates. See information supplied by the manufacturer.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

XYLENE **30-60%**

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	

AROMATIC POLYISOCYANATE PREPOLYMER **10-30%**

CAS-No.: 67815-87-6 **EC No.:**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Resp. Sens. 1 - H334	R42/43,R52/53.
Skin Sens. 1 - H317	
Aquatic Chronic 3 - H412	

ETHYLBENZENE **10-30%**

CAS-No.: 100-41-4 **EC No.: 202-849-4**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	F;R11
Acute Tox. 4 - H332	Xn;R20

DIPHENYLMETHANE-4,4'-DI-ISOCYANATE **10-30%**

CAS-No.: 101-68-8 **EC No.: 202-966-0**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 4 - H332	Carc. Cat. 3;R40
Skin Irrit. 2 - H315	Xn;R20,R48/20
Eye Irrit. 2 - H319	Xi;R36/37/38
Resp. Sens. 1 - H334	R42/43
Skin Sens. 1 - H317	
Carc. 2 - H351	
STOT SE 3 - H335	
STOT RE 2 - H373	

OLIGOMERIC MDI **5-10%**

CAS-No.: 32055-14-4 **EC No.: 500-079-6**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 4 - H332	Xn;R20,R48/20.
Skin Irrit. 2 - H315	Carc. Cat. 3;R40.
Eye Irrit. 2 - H319	Xi;R36/37/38.
Resp. Sens. 1 - H334	R42/43.
Skin Sens. 1 - H317	
Carc. 2 - H351	
STOT SE 3 - H335	
STOT RE 2 - H373	

DIPHENYLMETHANE-2,4'-DI-ISOCYANATE **1-5%**

CAS-No.: 5873-54-1 **EC No.: 227-534-9**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 4 - H332	Carc. Cat. 3;R40
Skin Irrit. 2 - H315	Xn;R20,R48/20
Eye Irrit. 2 - H319	Xi;R36/37/38
Resp. Sens. 1 - H334	R42/43
Skin Sens. 1 - H317	
Carc. 2 - H351	
STOT SE 3 - H335	
STOT RE 2 - H373	

DIPHENYLMETHANE-2,2'-DI-ISOCYANATE		< 1%
CAS-No.: 2536-05-2	EC No.: 219-799-4	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 4 - H332	Carc. Cat. 3;R40
Skin Irrit. 2 - H315	Xn;R20,R48/20
Eye Irrit. 2 - H319	Xi;R36/37/38
Resp. Sens. 1 - H334	R42/43
Skin Sens. 1 - H317	
Carc. 2 - H351	
STOT SE 3 - H335	
STOT RE 2 - H373	

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

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Get medical attention if any discomfort continues.

Inhalation

Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

Ingestion

Remove victim immediately from source of exposure. Provide fresh air, warmth and rest, preferably in comfortable upright sitting position. DO NOT induce vomiting. Get medical attention immediately.

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Preferably, use a cleanser based on polyethylene glycol. Get medical attention if irritation persists 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

Irritation of the respiratory tract: may trigger sensitisation of the skin and respiratory tract.

Ingestion

May cause discomfort if swallowed.

Skin contact

Skin irritation.

Eye 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! Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with foam, carbon dioxide, dry powder or water fog.

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

Hazardous combustion products

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO_2). Nitrous gases (NOx). Isocyanate vapours. Hydrogen cyanide (HCN).

Unusual Fire & Explosion Hazards

Vapours may ignite.

Specific hazards

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

5.3. Advice for firefighters

Special Fire Fighting Procedures

Containers close to fire should be removed or cooled with water. Keep run-off water out of sewers and water sources. Dike for water control.

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. Provide adequate ventilation.

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

Remove sources of ignition. Ventilate well. Remove mechanically. Collect with absorbent, non-combustible material into suitable containers. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer. Do not close container tightly. Risk of excess pressure build-up. Keep damp in a safe ventilated area for several days.

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

Provide good ventilation. Avoid inhalation of vapours/spray and contact with skin and eyes. Static electricity and formation of sparks must be prevented. Keep away from heat, sparks and open flame. Eliminate all sources of ignition.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Store in closed original container at temperatures between 5°C and 25°C.

Storage Class

Chemical storage. 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
DIPHENYLMETHANE-2,2'-DI-ISOCYANATE	WEL		0.02 mg/m3(Sen)		0.07 mg/m3(Sen)	
DIPHENYLMETHANE-2,4'-DI-ISOCYANATE	WEL		0.02 mg/m3(Sen)		0.07 mg/m3(Sen)	
DIPHENYLMETHANE-4,4'-DI-ISOCYANATE	WEL		0,02 mg/m3		0,07 mg/m3	Sen, as NCO
ETHYLBENZENE	WEL	100 ppm(Sk)	441 mg/m3(Sk)	125 ppm(Sk)	552 mg/m3(Sk)	
XYLENE	WEL	50 ppm	220 mg/m3	100 ppm	441 mg/m3	Sk

WEL = Workplace Exposure Limit.
Sk = Can be absorbed through skin.
Sen = Capable of causing occupational asthma.

Ingredient Comments

WEL = Workplace Exposure Limits

OLIGOMERIC MDI (CAS: 32055-14-4)

DNEL

Industry	Dermal	Short Term	Systemic Effects	50 mg/kg/day
Industry	Inhalation.	Short Term	Systemic Effects	0.1 mg/m3
Industry	Inhalation.	Long Term	Systemic Effects	0.05 mg/m3

8.2. Exposure controls

Protective equipment

Engineering measures

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

Chemical respirator with organic vapour cartridge, full facepiece, dust and mist filter.

Hand protection

Chemical resistant protective gloves (EN 374). Butyl rubber. Nitrile. Viton rubber (fluor rubber). The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection

Goggles/face shield are recommended.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke. DO NOT SMOKE IN WORK AREA!

Skin protection

Wear apron or protective clothing in case of contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Brown.
Odour	Aromatic.
Solubility	Insoluble in water
Initial boiling point and boiling range (°C)	140°C
Relative density	1.04

Vapour pressure	ca. 1 kPa
pH-Value, Conc. Solution	
Scientifically unjustified.	
Flash point (°C)	30°C
Auto Ignition Temperature (°C)	500°C
Flammability Limit - Lower(%)	1.1%
Flammability Limit - Upper(%)	7%

9.2. Other information

Volatile Organic Compound (VOC)	480 g/litre

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Exothermic reaction with: Alcohols, glycols. Amines. Water, forming CO2; in closed containers, risk of bursting owing to pressure increase.

10.2. Chemical stability

Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Reacts with water, with formation of carbon dioxide.

Hazardous Polymerisation

May polymerise.

Polymerisation Description

Polymerises above 200°C with evolution of CO2

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 alkalis. Strong oxidising substances. Amines. Mercaptans (thiols). Hydrocarbons - halogenated. Water, steam, water mixtures.

10.6. Hazardous decomposition products

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2). Nitrous gases (NOx).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:

Acute Toxicity (Oral LD50)

> 2000 mg/kg Rat

The toxological assessment is based on a knowledge of the toxicity of the product's components.

Inhalation

May cause irritation to the respiratory system. May cause sensitisation by inhalation.

Ingestion

May cause nausea, vomiting and diarrhoea.

Skin contact

Irritating to skin. May cause sensitisation by skin contact.

Eye contact

Irritating to eyes.

Health Warnings

Preparation contains small volumes of isocyanate which may cause allergic reaction and irritation of respiratory system.

Route of entry

Skin and/or eye contact.

Target Organs

Respiratory system, lungs

Medical Considerations

Persons who suffer from hypersensitivity of the respiratory tract (e.g. asthmatics and those who suffer from chronic bronchitis) are advised not to work with this product.

Specific effects

Delayed appearance of the complaints and development of hyper-sensitivity (difficult breathing, coughing, asthma) are possible. Hypersensitive persons may suffer from these effects even at low isocyanate concentrations.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

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

12.1. Toxicity

Acute Fish Toxicity

Ecotoxic to fish/daphnia/algae

12.2. Persistence and degradability

Degradability

The product is not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

Not expected to be bioaccumulative

12.4. Mobility in soil

Mobility:

The product is insoluble in water. The product contains organic solvents which will evaporate easily from all surfaces.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not relevant

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

13.1. Waste treatment methods

Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point. Empty containers must not be burned because of explosion hazard.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1866
UN No. (IMDG)	1866
UN No. (ICAO)	1866

14.2. UN proper shipping name

Proper Shipping Name	RESIN SOLUTION

14.3. Transport hazard class(es)

ADR/RID/ADN Class	3
ADR/RID/ADN Class	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

No.

14.6. Special precautions for user

EMS	F-E, S-E
Emergency Action Code	•3Y
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

Uk Regulatory References

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

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.

Safety Data Sheets for Substances and Preparations.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

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.

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 20 January 2014

Revision 5

Risk Phrases In Full

R10	Flammable.
R20/21	Harmful by inhalation and in contact with skin.
R20	Harmful by inhalation.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R11	Highly flammable
R36/37/38	Irritating to eyes, respiratory system and skin.
R38	Irritating to skin.
R40	Limited evidence of a carcinogenic effect.
R42/43	May cause sensitisation by inhalation and skin contact.

Hazard Statements In Full

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H226	Flammable liquid and vapour.
H332	Harmful if inhaled.
H312	Harmful in contact with skin.
H412	Harmful to aquatic life with long lasting effects.
H225	Highly flammable liquid and vapour.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs <<Organs>> through prolonged or repeated exposure.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.