SAFETY DATA SHEET

1: IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product Name: EXPOFLEX 800 BASE
Application: Base component of two part epoxy PU joint sealant.
Company: Fosroc Limited
Address: Coleshill Road, Tamworth, Staffordshire. B78 3TL
Telephone: 01827 262222 Out of Hours: 01827 265279 Fax: 01827 262444

2: COMPOSITION/INFORMATION ON INGREDIENTS

Composition:
White viscous liquid containing epoxy resin, polyurethane resin, inorganic fillers.

<table>
<thead>
<tr>
<th>Hazardous Ingredient(s)</th>
<th>Symbol</th>
<th>Risk Phrases</th>
<th>Other Information</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>epoxy resin (number average molecular weight &lt;700)</td>
<td>Xi, N</td>
<td>R36/38, 43, 51/53</td>
<td>Cas No: 25068-38-6</td>
<td>&lt;25</td>
</tr>
<tr>
<td>C_{10}-C_{16} alkyl glycidyl ether</td>
<td>Xi, N</td>
<td>R43, R51/53</td>
<td>Cas No: 68081-84-5</td>
<td>&lt;5</td>
</tr>
<tr>
<td>hexanediol diglycidylether</td>
<td>Xi</td>
<td>R43, 36/38</td>
<td>Cas No: 16096-31-4</td>
<td>&lt;5</td>
</tr>
</tbody>
</table>

All constituents of this product are listed in EINECS (European Inventory of Existing Commercial Chemical Substances) or ELINCS (European List of New Chemical Substances) or are exempt.
Refer to Section 8 for Occupational Exposure Limits.

3: HAZARDS IDENTIFICATION

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

4: FIRST AID MEASURES

- **Eyes:** Irrigate immediately with copious quantities of water for several minutes. Obtain medical attention if irritation persists.
- **Skin:** Wash thoroughly with soap and water or suitable skin cleanser as soon as possible. Obtain medical advice if skin disorders develop.
- **Inhalation:** Remove from exposure.
- **Ingestion:** Obtain medical attention. Do NOT induce vomiting. Beware of aspiration if vomiting occurs.

5: FIRE FIGHTING MEASURES

- **Suitable Extinguishing Media:** Carbon dioxide, powder, foam or water fog - Do not use water jets.
- **Special Exposure Hazards:** Toxic fumes. For further information see Section 10.
- **Special Protective Equipment:** Self-contained breathing apparatus.

6: ACCIDENTAL RELEASE MEASURES

- **Personal Precautions:** Wear suitable protective clothing, gloves and eye/face protection.
Environmental Precautions: Prevent entry into drains, sewers and water courses.
Decontamination Procedures: Soak up with inert absorbent or contain and remove by best available means. Gather into containers. Dispose of as waste.

7: HANDLING AND STORAGE

Handling: Avoid skin and eye contact. Maintain good standards of personal hygiene.
Storage: Keep containers dry and tightly closed.

8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:- None assigned.

<table>
<thead>
<tr>
<th>Substance</th>
<th>8 Hour TWA</th>
<th>STEL</th>
<th>Source/Other Information</th>
</tr>
</thead>
</table>

| Engineering Control Measures: | No specific ventilation requirement noted. |
| Personal Protective Equipment: | Impervious gloves (eg PVC). Goggles (Conforming to EN 166). Plastic apron. Change contaminated clothing and clean before re-use. |

9: PHYSICAL AND CHEMICAL PROPERTIES

| Physical State: | Viscous liquid. |
| Colour: | White |
| Odour: | Mild. |
| pH(concentrate): | Not applicable. |
| pH(working dilution): | |
| Boiling Point/Range (°C): | Not determined. |
| Melting Point/Range (°C): | |
| Flash Point (closed, °C): | >150 |
| Autoignitability (°C): | Not determined. |
| Viscosity (at 20°C): | |
| Explosive Properties (%): | Not known. |
| Oxidising Properties: | |
| Vapour Pressure (kPa at 20°C): | <0.008 |
| Relative Density (at 20°C): | 1.34 |
| Water Solubility: | Insoluble. |
| Fat Solubility: | Not determined. |
| Partition Coefficient (n-octanol/water): | |
| Other data: | |

10: STABILITY AND REACTIVITY

| Stability: | Stable: reacts with compounds containing amino, hydroxyl or carboxyl groups to give stable, cross linked materials. |
| Conditions to Avoid: | None known. |
| Hazardous Decomposition Products: | Thermal decomposition:- Carbon monoxide. Irritant fumes. |
11: TOXICOLOGICAL INFORMATION

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

Expected oral LD50, rat > 2g/kg.

Classified as an eye and skin irritant.

Classified as a skin sensitisier

**Health Effects**

On Eyes: Causes transient irritation.

On Skin: Irritation. May cause sensitisation.

By Inhalation: Low volatility makes inhalation unlikely at ambient temperatures.

By Ingestion: May cause irritation of mouth, throat and digestive tract.

Chronic: Repeated and prolonged skin contact may lead to skin disorders.

Other:

12: ECOLOGICAL INFORMATION

Environmental Assessment: When used and disposed of as intended, no adverse environmental effects are foreseen.

Mobility: Viscous liquid. Insoluble in water.

Persistence and Degradability: Not readily biodegradable.

Bioaccumulative Potential: Has the potential to bioaccumulate.

Ecotoxicity: Ecotoxic to fish/daphnia/algae.

13: DISPOSAL CONSIDERATIONS

Disposal must be in accordance with local and national legislation.

Unused Product: Dispose of through an authorised waste contractor to a licensed site. May be reacted with hardener component to give an inert polymeric material.

Used/Contaminated Product: Dispose of through an authorised waste contractor to a licensed site.

Packaging: Must be disposed of through an authorised waste contractor.

14: TRANSPORT INFORMATION

UN Number: 3082

IMO: Class: 9 Packing Group: 111 Marine Pollutant: Yes

IATA/ICAO: Class: 9 Packing Group: 111

ADR: Class: 9 Item: 11c

Transport Name: Environmentally hazardous substance, liquid, nos Epoxy Resin

Hazchem/Kemler Code:

15: REGULATORY INFORMATION

**Hazard Label Data:**

Named Ingredients: epoxy resin (number average molecular weight <700)

UN Number: 3082

Symbol(s): Xi,N

Risk Phrases: 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

Safety Phrases:
S28: After contact with skin, wash immediately with plenty of soap and water.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S0062: Contains epoxy constituents. See information supplied by the manufacturer.

EC Directives:
Safety Framework Directive, 89/391/EEC.
Hazardous Waste Directive, 91/689/EEC.
Dangerous Preparations Directive, 1999/45/EC.
Safety Data Sheets Directive, 91/155/EEC.

Statutory Instruments:
Health & Safety at Work, etc. Act 1974.
Control of Substances Hazardous to Health Regs. 1999 (SI 3246).
Environmental Protection Act 1990.

Codes of Practice:
Waste Management. The Duty of Care.
Operational Provisions of the Road Traffic (Carriage of Dangerous Substances in packages etc.) Regs. 1986 (COP 17)

Guidance Notes:
Occupational skin diseases: health and safety precautions (EH 26).
Storage of packaged dangerous substances [HS(G)71].

The above publications are available from HMSO

16: OTHER INFORMATION
Also refer to the Safety Data Sheet(s) for information on other components of this product.

The data and advice given apply when the product is used for the stated application or applications. The product is not sold as suitable for any other application. Use of the product for applications other than as stated in this sheet may give rise to risks not mentioned in this sheet.
The product should not be used other than for the stated application or applications without seeking advice from Fosroc Ltd.
If this product has been purchased for supply to a third party for use at work, it is the purchaser's duty to take all necessary steps to secure that any person handling or using the product is provided with the information in this sheet.
It is the responsibility and duty of the employer to inform employees and others who may be affected of any hazards described in this sheet and of any precautions which should be taken.
This sheet does not constitute or substitute for the users own assessment of workplace risk, as required by other health and safety legislation.

Further copies of this Safety Data Sheet may be obtained from Fosroc Limited.

Date Printed: 18/08/2006
SDS Reference: 200/7 PART A

REVISION
Supersedes issue no: 02 dated: 23.09.96
Sections updated/revised - no(s): 1, 12.
SAFETY DATA SHEET

1: IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product Name: **EXPONFLEX 800 CURING AGENT**

Application: Hardener component of two part epoxy PU joint sealant.

Company: **Fosroc Limited**

Address: Coleshill Road, Tamworth, Staffordshire. B78 3TL

Telephone: 01827 262222 Out of Hours: 01827 265279 Fax: 01827 262444

2: COMPOSITION/INFORMATION ON INGREDIENTS

Composition: Grey viscous liquid containing isophorone diamine, inorganic fillers, 2,4,6-tris(dimethylaminomethyl)phenol.

<table>
<thead>
<tr>
<th>Hazardous Ingredient(s)</th>
<th>Symbol</th>
<th>Risk Phrases</th>
<th>Other Information</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>isophorone diamine</td>
<td>C, N</td>
<td>R21/22, 34, 43, 52/53</td>
<td>Cas No: 2855-13-2</td>
<td>&gt;10 &lt;25</td>
</tr>
<tr>
<td>2,4,6-tris(dimethylamino methyl) phenol</td>
<td>Xn</td>
<td>R22, 36/38</td>
<td>Cas No: 90-72-2</td>
<td>&gt;2.5 &lt;10</td>
</tr>
</tbody>
</table>

All constituents of this product are listed in EINECS (European Inventory of Existing Commercial Chemical Substances) or ELINCS (European List of New Chemical Substances) or are exempt. Refer to Section 8 for Occupational Exposure Limits.

3: HAZARDS IDENTIFICATION

R34: Causes burns.
R21/22: Harmful in contact with skin and if swallowed
R43: May cause sensitisation by skin contact
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

CORROSIVE

4: FIRST AID MEASURES

**Eyes:** Irrigate immediately with copious quantities of water for several minutes. Obtain medical attention urgently.

**Skin:** Wash immediately with soap and water or suitable skin cleanser. Remove contaminated clothing immediately.

**Inhalation:** Remove from exposure. If feeling unwell obtain medical attention.

**Ingestion:** Obtain medical attention urgently. Do NOT induce vomiting. Beware of aspiration if vomiting occurs.

5: FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Carbon dioxide, powder, foam or water.

**Special Exposure Hazards:** Toxic fumes. Sulphur compounds. Nitrogen compounds.

**Special Protective Equipment:** Self-contained breathing apparatus.
6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear suitable protective clothing, gloves and eye/face protection.
Environmental Precautions: Prevent entry into drains, sewers and water courses.
Decontamination Procedures: Soak up with inert absorbent or contain and remove by best available means. Gather into containers. Dispose of as waste. Clean contaminated area with water.

7: HANDLING AND STORAGE

Handling: Avoid breathing vapours. Maintain good standards of personal hygiene. Avoid skin and eye contact.
Storage: Store only in original container. Never leave a container unsealed.

8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

<table>
<thead>
<tr>
<th>Substance</th>
<th>None assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8 Hour TWA</td>
</tr>
</tbody>
</table>

Engineering Control Measures:

Use only in well ventilated areas. Local exhaust ventilation is recommended.

Personal Protective Equipment:

Avoid skin and eye contact. Impervious gloves (e.g. PVC). Goggles (Conforming to EN 166). Plastic apron and overalls.

9: PHYSICAL AND CHEMICAL PROPERTIES

| Physical State: | Viscous liquid. |
| Colour: | Grey |
| pH(concentrate): | approx. 12.0 |
| pH(working dilution): | |
| Boiling Point/Range (°C): | 100 - 240 |
| Melting Point/Range (°C): | Not applicable |
| Flash Point (closed, °C): | >120 |
| Autoignitability (°C): | Autoignition temperature above 400 |
| Viscosity (at 20°C): | |
| Explosive Properties (%): | Not applicable. |
| Oxidising Properties: | Not determined. |
| Vapour Pressure (kPa at 20°C): | 0.98 |
| Relative Density (at 20°C): | 1.49 |
| Water Solubility: | Partially soluble |
| Fat Solubility: | |
| Partition Coefficient (n-octanol/water): | |
| Other data: | |

10: STABILITY AND REACTIVITY

Stability: Stable if used as directed
Conditions to Avoid: Temperatures (°C) below 0°C
11: TOXICOLOGICAL INFORMATION
The following toxicological assessment is based on a knowledge of the toxicity of the product's components:
Oral LD50, rat: 1660mg/kg
Dermal LD50, rat/rabbit: >2000mg/kg.

Health Effects
On Eyes: Causes irreversible damage to eye tissue if not removed promptly.
On Skin: Corrosive - causes burns. May cause sensitisation.
By Inhalation: May cause respiratory irritation.
By Ingestion: May cause irritation of mouth, throat and digestive tract. Ingestion of significant amounts may result in severe systemic effects.
Chronic: Repeated or prolonged skin contact will result in severe irritation leading to burns.
Other:

12: ECOLOGICAL INFORMATION
Environmental Assessment: When used and disposed of as intended, no adverse environmental effects are foreseen.
Mobility: Viscous liquid. Partially soluble in water.
Persistence and Degradability: Expected to be not readily biodegradable.
Bioaccumulative Potential: Not expected to be bioaccumulative.
Ecotoxicity: Ecotoxic to fish/daphnia/algae. Not expected to be inhibitory to sewage bacteria.

13: DISPOSAL CONSIDERATIONS
Disposal must be in accordance with local and national legislation.
Unused Product: Classified as a special waste. May be reacted with base component to give an inert polymeric material.
Used/Contaminated Product: Classified as a special waste. Dispose of through an authorised waste contractor to a licensed site.
Packaging: Must be disposed of through an authorised waste contractor.

14: TRANSPORT INFORMATION
UN Number: 1760
IMO: Class: 8 Packing Group: III Marine Pollutant: No
IATA/ICAO: Class: 8 Packing Group: III
ADR: Class: 8 Item: 66 (c)
Transport Name: Corrosive liquids, nos (isophorone diamine mixture)
Hazchem/Kemler Code: 2X / 80

15: REGULATORY INFORMATION
Hazard Label Data:-
Named Ingredients: isophorone diamine
UN Number: 1760
Symbol(s): C
Risk Phrases: R34: Causes burns.
R21/22: Harmful in contact with skin and if swallowed.
R43: May cause sensitisation by skin contact.
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
16: OTHER INFORMATION

Also refer to the Safety Data Sheet(s) for information on other components of this product.

The data and advice given apply when the product is used for the stated application or applications. The product is not sold as suitable for any other application. Use of the product for applications other than as stated in this sheet may give rise to risks not mentioned in this sheet. The product should not be used other than for the stated application or applications without seeking advice from Fosroc Ltd.

If this product has been purchased for supply to a third party for use at work, it is the purchaser's duty to take all necessary steps to secure that any person handling or using the product is provided with the information in this sheet.

It is the responsibility and duty of the employer to inform employees and others who may be affected of any hazards described in this sheet and of any precautions which should be taken.

This sheet does not constitute or substitute for the users own assessment of workplace risk, as required by other health and safety legislation.

Further copies of this Safety Data Sheet may be obtained from Fosroc Limited.

Date Printed: 18/08/2006

SDS Reference: 141/AC1 PART B

REVISION

Supersedes issue no: 03 dated: 23.09.96
Sections updated/revised - no(s): 1, 15

Issue No: 04 Date: 16.05.02 EXPOFLEX 800 CURING AGENT Page: 4 of 4