



## SAFETY DATA SHEET STOPGAP F77 RESIN

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

#### 1.1. Product identifier

Product name                    STOPGAP F77 RESIN  
Product number                F3744  
Internal identification        SGF77R/4

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

Identified uses                Component of epoxy damp proof membrane system  
Uses advised against        None

#### 1.3. Details of the supplier of the safety data sheet

Supplier                        F.Ball and Co. Ltd.  
                                      Churnetside Business Park,  
                                      Station Road,  
                                      Cheddleton,  
                                      Leek,  
                                      Staffordshire. ST13 7RS  
                                      Tel: 01538 361633 Mon-Fri 8.30am-5.00pm (Exc Bank Holidays)  
                                      Fax: 01538 361622  
                                      E.mail: msds@f-ball.co.uk

#### 1.4. Emergency telephone number

Emergency telephone        01538 361633 Mon-Fri 8.30am - 5.00pm (excluding Bank Holidays)

### 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;R51/53.

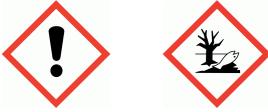
Human health                    The liquid is irritating to eyes and skin. Risk of sensitisation by skin contact

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

#### 2.2. Label elements

## STOPGAP F77 RESIN

### 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.

### Precautionary statements

P264 Wash contaminated skin thoroughly after handling.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P302+P352 IF ON SKIN: Wash with plenty of water.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P313 Get medical advice/attention.

### Contains

EPOXY RESIN (Number average MW ≤ 700 ), BISPHENOL F EPOXY RESIN, OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS

### Supplementary precautionary statements

P501 Dispose of contents/container in accordance with national regulations.

### 2.3. Other hazards

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<b>EPOXY RESIN (Number average MW ≤ 700 )</b>		<b>30-60%</b>
CAS number: 25068-38-6	EC number: 500-033-5	REACH registration number: 01-2119456619-26
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>	
Skin Irrit. 2 - H315	R43 Xi;R36/38 N;R51/53	
Eye Irrit. 2 - H319		
Skin Sens. 1 - H317		
Aquatic Chronic 2 - H411		
<b>BISPHENOL F EPOXY RESIN</b>		<b>1-10%</b>
CAS number: 9003-36-5	REACH registration number: 01-2119454392-40	
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>	
Skin Irrit. 2 - H315	Xi;R36/38. N;R51/53. R43.	
Eye Irrit. 2 - H319		
Skin Sens. 1 - H317		
Aquatic Chronic 2 - H411		

## STOPGAP F77 RESIN

<b>OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS</b>		<b>1-10%</b>
CAS number: 68609-97-2	REACH registration number: 01-2119485289	
<b>Classification</b> Skin Irrit. 2 - H315 Skin Sens. 1 - H317	<b>Classification (67/548/EEC or 1999/45/EC)</b> R43 Xi;R38	
<b>N-METHYL-2-PYRROLIDONE</b>		<b>&lt;0.5%</b>
CAS number: 872-50-4	EC number: 212-828-1	REACH registration number: 01-2119472430-46-xxxx
<b>Classification</b> Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Repr. 1B - H360D STOT SE 3 - H335	<b>Classification (67/548/EEC or 1999/45/EC)</b> Repr. Cat. 2;R61 Xi;R36/37/38	

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

**Composition comments** Epoxy resin blend.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	Remove affected person from source of contamination.
<b>Inhalation</b>	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Give plenty of water to drink. Do not induce vomiting. Get medical attention immediately.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention.

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

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	This is unlikely to occur but symptoms similar to those of ingestion may develop.
<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Skin contact</b>	Skin irritation. May cause an allergic skin reaction.
<b>Eye contact</b>	Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

#### 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 foam, carbon dioxide or dry powder.

## STOPGAP F77 RESIN

**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

**Specific hazards** Toxic gases/vapours/fumes of: Oxides of the following substances: Carbon. Nitrogen.

**Hazardous combustion products** Oxides of carbon. Oxides of nitrogen.

### 5.3. Advice for firefighters

**Protective actions during firefighting** No specific firefighting precautions known.

**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** Provide adequate ventilation. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid contact with skin and eyes.

### 6.2. Environmental precautions

**Environmental precautions** Avoid the spillage or runoff entering drains, sewers or watercourses. Contain spillages with sand, earth or any suitable absorbent material.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Absorb spillage with sand or other inert absorbent. Collect spillage in containers, seal securely and deliver for disposal as hazardous waste.

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Provide adequate ventilation. Good personal hygiene procedures should be implemented. Do not eat, drink or smoke when using the product.

**Advice on general occupational hygiene** Promptly remove any clothing that becomes contaminated. Wash contaminated clothing before reuse. Wash after use and before eating, smoking and using the toilet.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** Keep separate from food, feedstuffs, fertilisers and other sensitive material. Store in closed original container at temperatures between 5°C and 30°C. Store in a cool and well-ventilated place.

### 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

**N-METHYL-2-PYRROLIDONE**

## STOPGAP F77 RESIN

Long-term exposure limit (8-hour TWA): WEL 10 ppm 40 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 20 ppm 80 mg/m<sup>3</sup>

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through skin.

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

#### Personal protection

Always check applicability with your supplier of protective equipment.

#### Eye/face protection

If there is a risk of splashing, wear chemical resistant goggles or visor approved to BS EN166.

#### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Nitrile gloves to BSEN374 are recommended. Break through times can vary depending on thickness, use and source. Change gloves regularly.

#### Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination. Wear apron or protective clothing in case of contact.

#### Hygiene measures

Provide eyewash station. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Wash contaminated clothing before reuse.

#### Respiratory protection

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

#### Thermal hazards

None

#### Environmental exposure controls

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid.
Odour	Characteristic.
Odour threshold	Not determined.
pH	Not applicable.
Melting point	Not applicable.
Initial boiling point and range	Not determined.
Flash point	Not determined.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not applicable.

## STOPGAP F77 RESIN

<b>Upper/lower flammability or explosive limits</b>	Not applicable.
<b>Other flammability</b>	Not applicable.
<b>Vapour pressure</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Relative density</b>	1.8 approx. @ °C
<b>Bulk density</b>	Not determined.
<b>Solubility(ies)</b>	Insoluble in water.
<b>Partition coefficient</b>	Not determined.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	Not applicable.
<b>Viscosity</b>	2250-2750 cP @ °C
<b>Explosive properties</b>	Not applicable.
<b>Explosive under the influence of a flame</b>	Not considered to be explosive.
<b>Oxidising properties</b>	Not determined.
<b>Comments</b>	Information given is applicable to the product in its ready-to-use form.

### 9.2. Other information

<b>Other information</b>	None.
<b>Refractive index</b>	Not determined.
<b>Particle size</b>	Not applicable.
<b>Molecular weight</b>	Not determined.
<b>Volatility</b>	Not determined.
<b>Saturation concentration</b>	Not determined.
<b>Critical temperature</b>	Not determined.
<b>Volatile organic compound</b>	This product contains a maximum VOC content of 62 (when mixed with hardener) g/l.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

<b>Reactivity</b>	The following materials may react with the product: Acids. Strong alkalis. Strong oxidising agents.
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### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures.
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### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Under normal conditions of storage and use, hazardous reactions will not occur. Considerable exothermic reaction can occur when mixed with epoxide hardeners.
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### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid contact with acids and oxidising substances.
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## STOPGAP F77 RESIN

### 10.5. Incompatible materials

**Materials to avoid** Strong acids. Strong alkalis. Strong oxidising agents.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Oxides of carbon. Oxides of nitrogen.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Toxicological effects** No information available.

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** No specific test data are available.

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** No specific test data are available.

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** No specific test data are available.

#### Skin corrosion/irritation

**Skin corrosion/irritation** Irritating to skin.,Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.

#### Animal data

No specific test data are available.

#### Human skin model test

No specific test data are available.

#### Extreme pH

No specific test data are available.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Irritation of eyes is assumed.

#### Respiratory sensitisation

**Respiratory sensitisation** No specific test data are available.

#### Skin sensitisation

**Skin sensitisation** Sensitising.

#### Germ cell mutagenicity

**Genotoxicity - in vitro** No specific test data are available.

**Genotoxicity - in vivo** No specific test data are available.

#### Carcinogenicity

**Carcinogenicity** No specific test data are available.

#### Target organ for carcinogenicity

No specific target organs known.

#### IARC carcinogenicity

Not listed.

#### Reproductive toxicity

**Reproductive toxicity - fertility** No specific test data are available.

#### Specific target organ toxicity - single exposure

**STOT - single exposure** No specific test data are available.

#### Specific target organ toxicity - repeated exposure

## STOPGAP F77 RESIN

<b>STOT - repeated exposure</b>	No specific test data are available.
<b><u>Aspiration hazard</u></b>	
<b>Aspiration hazard</b>	Not relevant.
<b>General information</b>	
<b>Inhalation</b>	May cause some discomfort in poorly ventilated areas.
<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Skin contact</b>	Prolonged or repeated exposure may cause severe irritation. May cause sensitisation by skin contact.
<b>Eye contact</b>	Irritating to eyes.
<b>Acute and chronic health hazards</b>	Irritating to skin. Irritating to eyes. May cause sensitisation by skin contact.
<b>Route of entry</b>	Skin and/or eye contact
<b>Target organs</b>	Eyes Skin
<b>Medical symptoms</b>	Skin irritation. Irritation of eyes and mucous membranes.
<b>Medical considerations</b>	Pre-existing eye problems. Skin disorders and allergies.

### Toxicological information on ingredients.

#### EPOXY RESIN (Number average MW <= 700 )

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> 2,000.0  
mg/kg)

Species Rat

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> 2,000.0  
mg/kg)

Species Rat

#### BISPHENOL F EPOXY RESIN

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> 2,000.0  
mg/kg)

Species Rat

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> 2,000.0  
mg/kg)

Species Rabbit

#### OXIRANE, MONO [(C12-14- ALKYL OXY)METHYL] DERIVS

##### Acute toxicity - oral

## STOPGAP F77 RESIN

Acute toxicity oral (LD<sub>50</sub>  
mg/kg) 17,100.0

Species Rat

### SECTION 12: Ecological Information

**Ecotoxicity** The product should not be allowed to enter drains, sewers or watercourses. Toxic to aquatic life with long lasting effects.

#### 12.1. Toxicity

**Toxicity** Not available

**Acute toxicity - fish** Not determined

**Acute toxicity - aquatic invertebrates** Not determined.

**Acute toxicity - aquatic plants** Not determined.

**Acute toxicity - microorganisms** Not determined.

**Acute toxicity - terrestrial** Not determined.

**Chronic toxicity - fish early life stage** Not determined.

**Short term toxicity - embryo and sac fry stages** Not determined.

**Chronic toxicity - aquatic invertebrates** Not determined.

#### Ecological information on ingredients.

##### EPOXY RESIN (Number average MW <= 700 )

**Acute toxicity - fish** LC50, 96 hours, 96 hours: 1.3 mg/l, Onchorhynchus mykiss (Rainbow trout)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours, 48 hours: 2.1 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** , 72 hours, 72 hours: > 11 mg/l, Freshwater algae

**Acute toxicity - microorganisms** EC<sub>50</sub>, 3 hours, 3 hours: > 100 mg/l, Activated sludge

##### BISPHENOL F EPOXY RESIN

**Acute toxicity - fish** LC50, 96 hours, 96 hours: 2.54 mg/l, Freshwater fish

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours, 48 hours: 2.55 mg/l, Daphnia magna

##### OXIRANE, MONO [(C12-14- ALKYL OXY)METHYL] DERIVS

**Acute toxicity - fish** LC50, 96 hours, 96 hours: > 1800 , Leuciscus idus (Golden orfe)

## STOPGAP F77 RESIN

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours, 48 hours: 844 mg/l, Daphnia magna

**Acute toxicity - microorganisms** EC<sub>50</sub>, >: > 100 mg/l, Activated sludge

### 12.2. Persistence and degradability

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

**Phototransformation** Not determined.

**Stability (hydrolysis)** Not determined.

**Biodegradation** Highly insoluble in water.

**Biological oxygen demand** Not determined.

**Chemical oxygen demand** Not determined.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** Not determined.

### 12.4. Mobility in soil

**Mobility** The product is insoluble in water.

**Adsorption/desorption coefficient** Not determined.

**Henry's law constant** Not determined.

**Surface tension** Not determined.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This substance is not classified as PBT or vPvB according to current EU criteria.

### 12.6. Other adverse effects

**Other adverse effects** None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal methods** Small quantities of product may be treated with an equivalent quantity of product hardener, allowed to cure and disposed of as low hazard waste. Large quantities should be disposed of via licensed waste operators to an approved incineration unit. Product containers must not be re-used without commercial cleaning.

## SECTION 14: Transport information

### 14.1. UN number

UN No. (ADR/RID) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

### 14.2. UN proper shipping name

## STOPGAP F77 RESIN

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

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

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

**Proper shipping name (ADN)** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (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

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 (ADR/RID) 90

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).  
No listing known.

**Guidance** Safety Data Sheets for Substances and Preparations.  
Approved Classification and Labelling Guide (Sixth edition) L131.

## STOPGAP F77 RESIN

**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

<b>General information</b>	Type of Regulated Paint under the Air Pollution Control (Volatile Organic Compounds) Regulation of Hong Kong (Primers, Sealers and Undercoats). VOC Content (mixed with hardener) not exceeding 62g/litre.
<b>Key literature references and sources for data</b>	Health and Safety Executive Guidance Note EH40 (amended annually). Workplace Exposure Limits.
<b>Revision comments</b>	Section 9: update. Section 11 update. Section 12 update.
<b>Revision date</b>	18/02/2016
<b>Revision</b>	4
<b>Supersedes date</b>	05/03/2015
<b>SDS status</b>	Approved.
<b>Risk phrases in full</b>	R10 Flammable. R36/37/38 Irritating to eyes, respiratory system and skin. R36/38 Irritating to eyes and skin. R37 Irritating to respiratory system. R38 Irritating to skin. R43 May cause sensitisation by skin contact. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R61 May cause harm to the unborn child. R65 Harmful: may cause lung damage if swallowed. R66 Repeated exposure may cause skin dryness or cracking. R67 Vapours may cause drowsiness and dizziness.
<b>Hazard statements in full</b>	H315 Causes skin irritation. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H335 May cause respiratory irritation. H360D May damage the unborn child. H360D May damage the unborn child. H411 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.