

# GHS Safety Data Sheet



Commercial Product Name: FIS EM  
390/585/1500 S - Component B  
(Hardener)

Revision date: 18.04.2013

Version: 3.0/en

Print date: 22.05.2013

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

### **1.1 Product identifier**

**Commercial Product Name** FIS EM 390/585/1500 S - Component B (Hardener)

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

**Relevant identified uses** composite mortar

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

**Company designation** fischerwerke GmbH & Co. KG  
Weinhalde 14-18  
D-72178 Waldachtal  
Telephone: +49(0)7443 12-0  
FAX: +49(0)7443 12-4222  
Email: info-sdb@fischer.de

**Marketer** AnchorMark Pty. Ltd.  
Unit 1, 61 Waterview Close  
Dandenong South VIC 3175, Australia  
Telephone: +61 (0) 3 97992096  
FAX: +61 (0) 3 97992696  
Email: info@anchormark.com.au

### **1.4 Emergency telephone number**

**Emergency telephone number** +61 (0) 39 79 92 096 (available 8:00 a.m. - 6:00 p.m.) / +49 (0) 61 32 84 463 (24h - english speaking)

## **SECTION 2: Hazards identification**

### **2.1 Classification of the substance or mixture**

**Classification according to GHS** Acute Tox. 4; H332 Skin Corr. 1B; H314 Skin Sens. 1; H317 Repr. 2; H361f STOT SE 3; H335 Aquatic Chronic 3; H412

### **2.2 Label elements**

**Hazard pictogram**



GHS05



GHS07



GHS08

**Signal word**

Danger

**Hazardous component(s) to be indicated on label**

m-phenylenebis(methylamine), 4, 4'-isopropylidenediphenol

**H-statement(s)**

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H332: Harmful if inhaled.

H335: May cause respiratory irritation.

H361f: Suspected of damaging fertility.

H412: Harmful to aquatic life with long lasting effects.

**P-statement(s)**

P102: Keep out of reach of children.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P281: Use personal protective equipment as required.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313: IF exposed or concerned: Get medical advice/attention.

P405: Store locked up.

### **SECTION 3: Composition/information on ingredients**

#### **Hazardous ingredients**

<b>Ingredient</b>	<b>CAS No.</b>	<b>GHS Classification</b>	<b>Concentration</b>
m-phenylenebis(methylamine)	1477-55-0	Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Corr. 1B; H314 Skin Sens. 1; H317 Aquatic Chronic 3; H412	25.0 - 50.0 % by weight
portland cement	65997-15-2	Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin STOT SE 3; H335	25.0 - 50.0 % by weight
aliphatic polyamine		Aquatic Chronic 4; H413	10.0 - 25.0 % by weight

benzyl alcohol	100-51-6	Acute Tox. 4; H332 Acute Tox. 4; H302	2.5 - 10.0 % by weight
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	Acute Tox. 4; H302 Eye Irrit. 2; H319 Skin Irrit. 2; H315	2.5 - 10.0 % by weight
4,4'-isopropylidenediphenol	80-05-7	Repr. 2; H361f STOT SE 3; H335 Eye Dam. 1; H318 Skin Sens. 1; H317	2.5 - 10.0 % by weight

## **SECTION 4: First aid measures**

### **4.1 Description of first aid measures**

<b>General advice</b>	If symptoms persist, call a physician. Take off all contaminated clothing immediately. Remove/Take off immediately all contaminated clothing.
<b>If inhaled</b>	Move to fresh air. If symptoms persist, call a physician.
<b>In case of skin contact</b>	Do not get on skin. Wash off immediately with soap and plenty of water. If skin irritation or rash occurs, seek medical advice/attention.
<b>In case of eye contact</b>	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
<b>If swallowed</b>	If swallowed, seek medical advice immediately and show this container or label. Rinse mouth with water. Drink 1 or 2 glasses of water. Do NOT induce vomiting.

## **SECTION 5: Firefighting measures**

### **5.1 Extinguishing media**

<b>Suitable extinguishing media</b>	Dry powder Foam Carbon dioxide (CO <sub>2</sub> ) Water spray jet
<b>Extinguishing media which must not be used for safety reasons</b>	High volume water jet

### **5.2 Special hazards arising from the substance or mixture**

<b>Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases</b>	Hazardous decomposition products formed under fire conditions. Sulphur oxides nitrogen oxides (NO <sub>x</sub> )
--	--

### **5.3 Advice for firefighters**

<b>Special protective equipment for firefighting</b>	In the event of fire, wear self-contained breathing apparatus. In the event of fire and/or explosion do not breathe fumes.
<b>Additional information on</b>	Fire residues and contaminated fire extinguishing water must be

firefighting disposed of in accordance with local regulations.

## **SECTION 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

### **6.2 Environmental precautions**

**Environmental precautions** The product should not be allowed to enter drains, water courses or the soil.

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

**Methods for cleaning up** Use mechanical handling equipment.  
Dispose of contents/container in accordance with local regulation.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

**Advice on safe handling** None under normal processing.

**Precautions** Observe label precautions.  
For personal protection see section 8.

**Advice on protection against fire and explosion** not required under normal use

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

**Storage space and container requirements** Store in original container.  
Keep container tightly closed.  
Store in accordance with local regulations.

**Hints on storage assembly** Do not store near acids.  
Keep away from oxidising agents, strongly acid or alkaline materials, as well as of amines, alcohols and water.

**Storage specifications** Keep container tightly closed in a dry and well-ventilated place.  
Protect from sunlight and store in well-ventilated place.

## **SECTION 8: Exposure controls/personal protection**

**Respiratory protection** No personal respiratory protective equipment normally required.  
In case of inadequate ventilation wear respiratory protection.

### **Hand protection**

*Suitable material:* butyl-rubber

*Break through time:* > 120 min

*Remarks:* Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Protective gloves complying with EN 374.

*Reference substance:* Replace when worn.

**Eye protection** Safety glasses

**Skin and body protection** Wear suitable protective equipment.

**General protective and hygiene measures** Avoid contact with the skin and the eyes.  
Smoking, eating and drinking should be prohibited in the application area.  
Wash hands before breaks and immediately after handling the product.  
Keep away from food, drink and animal feedingstuffs.  
Use protective skin cream before handling the product.

**Information on environmental protection regulations** No special environmental precautions required.

## **SECTION 9: Physical and chemical properties**

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

<b>Form</b>	paste
<b>Colour</b>	black
<b>Odour</b>	characteristic
<b>Flash point [°C]</b>	> 100 °C
<b>Risk of explosion.</b>	Not explosive
<b>Density [g/cm<sup>3</sup>]</b>	1,4 - 1,6 g/cm <sup>3</sup>
<b>Autoinflammability</b>	not auto-flammable
<b>Viscosity, dynamic [kg/(m*s)]</b>	~ 100 Pas
<i>Measuring method:</i>	Brookfield (Sp.7), 10 U/min
<i>Temperature:</i>	20 °C

## **SECTION 10: Stability and reactivity**

### **10.3 Possibility of hazardous reactions**

**Hazardous reactions** No dangerous reaction known under conditions of normal use.

### **10.4 Conditions to avoid**

**Conditions to avoid** No dangerous reaction known under conditions of normal use.

### **10.5 Incompatible materials**

**Materials to avoid** Strong acids and oxidizing agents

### **10.6 Hazardous decomposition products**

**Hazardous decomposition products** None reasonably foreseeable.

## **SECTION 11: Toxicological information**

### **11.1 Information on toxicological effects**

### **11.2 Additional information**

**Other information (chapter 11.)** There is no data available for this product.

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

### **12.6 Other adverse effects**

**Further information on ecology** No information on ecology is available.


## **SECTION 13: Disposal considerations**

### **13.1 Waste treatment methods**

**Disposal considerations** Disposal together with normal waste is not allowed. Special disposal required according to local regulations.

**Uncleaned empty packaging** Dispose of as unused product.

## **SECTION 14: Transport information**

	Land transport ADR/RID	Marine transport IMDG	Air transport ICAO/IATA
UN-No	3259	3259	3259
Class	8	8	8
Packaging group	II	II	II
Description of the goods	AMINES, SOLID, CORROSIVE, N.O.S.	AMINES, SOLID, CORROSIVE, N.O.S.	Amines, solid, corrosive, n.o.s.
Proper shipping name		AMINES, SOLID, CORROSIVE, N.O.S.	Amines, solid, corrosive, n.o.s.
Remarks	LQ23: 3kg	LQ: 1 kg	
Danger releasing substance	m-phenylenebis(methylamine)	m-phenylenebis(methylamine)	m-phenylenebis(methylamine)
Labels	8 	8	8 - Corrosive
Risk No.	80		
Category	2		
Classification Code	C8		
Tunnel restriction code	E		
Environmental hazards	0: Non marine pollutant	0: Non-marine pollutant	
EmS		F-A;S-B	
Stowage category		A	

## **SECTION 15: Regulatory information**

**Additional information** HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

## **SECTION 16: Other information**

**Relevant H-phrases**

- H302: Harmful if swallowed.
- H314: Causes severe skin burns and eye damage.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H318: Causes serious eye damage.
- H319: Causes serious eye irritation.
- H332: Harmful if inhaled.
- H335: May cause respiratory irritation.
- H361f: Suspected of damaging fertility.
- H412: Harmful to aquatic life with long lasting effects.

**Wording of the hazard classes**

- Acute Tox.: Acute toxicity
- Skin Corr.: Skin corrosion

Skin Sens.: Skin sensitization  
Repr.: Reproductive toxicity  
STOT SE: Specific target organ toxicity - single exposure  
Aquatic Chronic: Hazardous to the aquatic environment  
Skin Irrit.: Skin irritation  
Eye Dam.: Serious eye damage  
Eye Irrit.: Serious eye irritation

Classification	evaluation
Acute Tox. 4; H332	calculated
Skin Corr. 1B; H314	calculated
Skin Sens. 1; H317	calculated
Repr. 2; H361f	calculated
STOT SE 3; H335	calculated
Aquatic Chronic 3; H412	calculated

This information is provided in accordance with the current status of our knowledge and experience. The Safety Data Sheet describes products with a view to relevant safety requirements. This information does not constitute a warranty of properties, features or qualities.

# GHS Safety Data Sheet



Commercial Product Name: FIS EM 390-585-1500 S - Component A (Mortar)

Revision date: 18.04.2013

Version: 3.0/en

Print date: 22.05.2013

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

### **1.1 Product identifier**

Commercial Product Name FIS EM 390-585-1500 S - Component A (Mortar)

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

Relevant identified uses composite mortar

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

Company designation fischerwerke GmbH & Co. KG  
Weinhalde 14-18  
D-72178 Waldachtal  
Telephone: +49(0)7443 12-0  
FAX: +49(0)7443 12-4222  
Email: info-sdb@fischer.de

Marketer AnchorMark Pty. Ltd.  
Unit 1, 61 Waterview Close  
Dandenong South VIC 3175, Australia  
Telephone: +61 (0) 3 97992096  
FAX: +61 (0) 3 97992696  
Email: info@anchormark.com.au

### **1.4 Emergency telephone number**

Emergency telephone number +61 (0) 39 79 92 096 (available 8:00 a.m. - 6:00 p.m.) / +49 (0) 61 32 84 463 (24h - english speaking)

## **SECTION 2: Hazards identification**

### **2.1 Classification of the substance or mixture**

Classification according to GHS Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 STOT SE 3; H335 Aquatic Chronic 2; H411

### **2.2 Label elements**

Hazard pictogram



GHS05





GHS07



GHS09

**Signal word**

Danger

**Hazardous component(s) to be indicated on label**

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700), portland cement, reaction product: bisphenol-F-(epichlorhydrin)Epoxy resin (number average molecular weight <= 700), trimethylolpropane triglycidyl ether

**H-statement(s)**

H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.  
H318: Causes serious eye damage.  
H335: May cause respiratory irritation.  
H411: Toxic to aquatic life with long lasting effects.

**P-statement(s)**

P101: If medical advice is needed, have product container or label at hand.  
P102: Keep out of reach of children.  
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.  
P310: Immediately call a POISON CENTER or doctor/physician.

**Further information**

EUH205: Contains epoxy constituents. May produce an allergic reaction.  
HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

**SECTION 3: Composition/information on ingredients**

**Hazardous ingredients**

Ingredient	CAS No.	GHS Classification	Concentration
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	25068-38-6	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Skin Sens. 1; H317 Aquatic Chronic 2; H411	25.0 - 50.0 % by weight
portland cement	65997-15-2	Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335	25.0 - 50.0 % by weight

reaction product: bisphenol-F-(epichlorhydrin)Epoxy resin (number average molecular weight <= 700)	28064-14-4	Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 2; H411	10.0 - 25.0 % by weight
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8	Eye Dam. 1; H318 Aquatic Chronic 3; H412	2.5 - 10.0 % by weight
trimethylolpropane triglycidyl ether	30499-70-8	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 3; H412	2.5 - 10.0 % by weight
2-methoxy-1-methylethyl acetate	108-65-6	Flam. Liq. 3; H226	< 2.5 % by weight
Solvent naphtha (petroleum), light arom.	64742-95-6	STOT SE 3; H335 Asp. Tox. 1; H304 Aquatic Chronic 2; H411	< 2.5 % by weight

## **SECTION 4: First aid measures**

### **4.1 Description of first aid measures**

<b>General advice</b>	If symptoms persist, call a physician. Take off all contaminated clothing immediately. Remove/Take off immediately all contaminated clothing.
<b>If inhaled</b>	Move to fresh air. If symptoms persist, call a physician.
<b>In case of skin contact</b>	Do not get on skin. Wash off immediately with soap and plenty of water. If skin irritation or rash occurs, seek medical advice/attention.
<b>In case of eye contact</b>	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
<b>If swallowed</b>	If swallowed, seek medical advice immediately and show this container or label. Rinse mouth with water. Drink 1 or 2 glasses of water. Do NOT induce vomiting.

## **SECTION 5: Firefighting measures**

### **5.1 Extinguishing media**

**Suitable extinguishing media** Dry powder  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Water spray jet

**Extinguishing media which must not be used for safety reasons** High volume water jet

### **5.2 Special hazards arising from the substance or mixture**

**Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases** Hazardous decomposition products formed under fire conditions.  
Sulphur oxides  
nitrogen oxides (NO<sub>x</sub>)

### **5.3 Advice for firefighters**

**Special protective equipment for firefighting** In the event of fire, wear self-contained breathing apparatus.  
In the event of fire and/or explosion do not breathe fumes.

**Additional information on firefighting** Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## **SECTION 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

### **6.2 Environmental precautions**

**Environmental precautions** The product should not be allowed to enter drains, water courses or the soil.

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

**Methods for cleaning up** Use mechanical handling equipment.  
Dispose of contents/container in accordance with local regulation.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

**Advice on safe handling** None under normal processing.

**Precautions** Observe label precautions.  
For personal protection see section 8.

**Advice on protection against fire and explosion** not required under normal use

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

**Storage space and container requirements** Store in original container.  
Keep container tightly closed.  
Store in accordance with local regulations.

**Hints on storage assembly** Do not store near acids.  
Keep away from oxidising agents, strongly acid or alkaline materials, as well as of amines, alcohols and water.

**Storage specifications** Keep container tightly closed in a dry and well-ventilated place.  
Protect from sunlight and store in well-ventilated place.

## **SECTION 8: Exposure controls/personal protection**

<b>Respiratory protection</b>	No personal respiratory protective equipment normally required. In case of inadequate ventilation wear respiratory protection.
<b>Hand protection</b>	
<i>Suitable material:</i>	butyl-rubber
<i>Break through time:</i>	> 120 min
<i>Remarks:</i>	Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
<i>Reference substance:</i>	Replace when worn.
<b>Eye protection</b>	Safety glasses
<b>Skin and body protection</b>	Wear suitable protective equipment.
<b>General protective and hygiene measures</b>	Avoid contact with the skin and the eyes. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feedingstuffs. Use protective skin cream before handling the product.
<b>Information on environmental protection regulations</b>	No special environmental precautions required.

## **SECTION 9: Physical and chemical properties**

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

<b>Form</b>	paste
<b>Colour</b>	grey
<b>Odour</b>	characteristic
<b>Flash point [°C]</b>	> 100 °C
<b>Risk of explosion.</b>	Not explosive
<b>Density [g/cm<sup>3</sup>]</b>	1,4 - 1,6 g/cm <sup>3</sup>
<b>Autoinflammability</b>	not auto-flammable
<b>Viscosity, dynamic [kg/(m*s)]</b>	~ 100 Pas
<i>Measuring method:</i>	Brookfield (Sp.7), 10 U/min
<i>Temperature:</i>	20 °C

### **9.2 Other information**

<b>Oxidizing properties</b>	no
-----------------------------	----

## **SECTION 10: Stability and reactivity**

### **10.3 Possibility of hazardous reactions**

<b>Hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
----------------------------	---

### **10.4 Conditions to avoid**

<b>Conditions to avoid</b>	No dangerous reaction known under conditions of normal use.
----------------------------	---

### **10.5 Incompatible materials**

<b>Materials to avoid</b>	Strong acids and oxidizing agents
---------------------------	-----------------------------------

### **10.6 Hazardous decomposition products**

<b>Hazardous decomposition products</b>	None reasonably foreseeable.
---	------------------------------

## **SECTION 11: Toxicological information**

### **11.1 Information on toxicological effects**

### **11.2 Additional information**

**Other information (chapter 11.)** There is no data available for this product.

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

### **12.6 Other adverse effects**

**Further information on ecology** No information on ecology is available.


## **SECTION 13: Disposal considerations**

### **13.1 Waste treatment methods**

**Disposal considerations** Disposal together with normal waste is not allowed. Special disposal required according to local regulations.

**Uncleaned empty packaging** Dispose of as unused product.

## **SECTION 14: Transport information**

	<b>Land transport ADR/RID</b>	<b>Marine transport IMDG</b>	<b>Air transport ICAO/IATA</b>
<b>UN-No</b>	3077	3077	3077
<b>Class</b>	9	9	9
<b>Packaging group</b>	III	III	III
<b>Description of the goods</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Bisphenol A/F Epoxy resin)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Bisphenol A/F Epoxy resin)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Bisphenol A/F Epoxy resin)
<b>Proper shipping name</b>		ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Bisphenol A/F Epoxy resin)	Environmentally hazardous substance, solid, n.o.s. (Bisphenol A/F Epoxy resin)
<b>Remarks</b>	LQ27: 6kg	LQ: 5 kg	
<b>Danger releasing substance</b>	2	2	2
<b>Labels</b>	9, U - Environmentally hazardous 	9, U - Environmentally hazardous	9, U - Environmentally hazardous
<b>Risk No.</b>	90		
<b>Category</b>	3		
<b>Classification Code</b>	M7		

<b>Tunnel restriction code</b>	E		
<b>EmS</b>		F-A;S-F	
<b>Environmental hazards</b>		marine pollutant	
<b>Stowage category</b>		A	

### **SECTION 15: Regulatory information**

**Additional information** HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

### **SECTION 16: Other information**

**Relevant H-phrases**

H226: Flammable liquid and vapour.  
H304: May be fatal if swallowed and enters airways.  
H312: Harmful in contact with skin.  
H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.  
H318: Causes serious eye damage.  
H319: Causes serious eye irritation.  
H335: May cause respiratory irritation.  
H411: Toxic to aquatic life with long lasting effects.  
H412: Harmful to aquatic life with long lasting effects.

**Wording of the hazard classes**

Skin Irrit.: Skin irritation  
Eye Dam.: Serious eye damage  
Skin Sens.: Skin sensitization  
STOT SE: Specific target organ toxicity - single exposure  
Aquatic Chronic: Hazardous to the aquatic environment  
Eye Irrit.: Serious eye irritation  
Acute Tox.: Acute toxicity  
Flam. Liq.: Flammable liquid  
Asp. Tox.: Aspiration hazard

Classification	Evaluation
Skin Irrit. 2; H315	Calculated
Eye Dam. 1; H318	Calculated
Skin Sens. 1; H317	Calculated
STOT SE 3; H335	Calculated
Aquatic Chronic 2; H411	Calculated

This information is provided in accordance with the current status of our knowledge and experience. The Safety Data Sheet describes products with a view to relevant safety requirements. This information does not constitute a warranty of properties, features or qualities.