

SECTION 1: Kit identification

1.1 Kit identifier

Trade name : FIS EM PLUS 390/585/1500 S

1.2 Details of the supplier of the Kit safety information sheet

fischerwerke GmbH & Co. KG

Klaus-Fischer-Straße 1

72178 Waldachtal - Germany

T +49(0)7443 12-0 - F +49(0)7443 12-4222

info-sdb@fischer.de - www.fischer.de

SECTION 2: General information

Storage : 5 - 25°C

A SDS for each of these components is included. Please do not separate any component SDS from this cover page This product is a Kit which consists of several independently packaged components

This Kit should be handled in accordance with good laboratory practices and appropriate personal protective equipment should be used

SECTION 3: Kit contents

Name	Classification according to Regulation (EC) No. 1272/2008 [CLP]
FIS EM PLUS 390/585/1500 S Component A (Mortar)	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360F STOT SE 3, H335 Aquatic Chronic 2, H411
FIS EM PLUS 390/585/1500 S Component B (Hardener)	Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 3, H412



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

1.1. Product identifier

Product form : Mixture
Trade name : FIS EM PLUS 390/585/1500 S Component A (Mortar)
UFI : EH20-U0SK-X00Y-08A7

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

1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use
Use of the substance/mixture : composite mortar

1.2.2. Uses advised against

Restrictions on use : Observe technical data sheet, Restricted to professional users

1.3. Details of the supplier of the safety data sheet

Manufacturer

fischerwerke GmbH & Co. KG
Klaus-Fischer-Straße, 1
72178 Waldachtal
Germany
T +49(0)7443 12-0 - F +49(0)7443 12-4222
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Distributor

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Corso Stati Uniti, 25
35127 Padova Z.I. Sud
Italy
T +39 04 98 06 31 11 - F +39 04 98 06 34 01
sercli@fischeritalia.it - www.fischeritalia.it

1.4. Emergency telephone number

Emergency number : +49(0)6132-84463 (24h)

Country	Organisation/Company	Address	Emergency number	Comment
Italy	Centro Antiveleni di Bergamo Azienda Ospedaliera Papa Giovanni XXII	Piazza OMS - Organizzazione Mondiale della Sanità, 1 24127 Bergamo	+39 800 88 33 00	
Italy	Centro Antiveleni di Milano Ospedale Niguarda Ca' Granda	Piazza Ospedale Maggiore 3 20162 Milan	+39 02 6610 1029	
Italy	Centro Antiveleni di Roma CAV Policlinico "A. Gemelli", Dipartimento di Tossicologia Clinica Università Cattolica del Sacro Cuore	Largo Agostino Gemelli, 8 00168 Rome	+39 06 305 4343	
Italy	Centro Antiveleni di Roma CAV Policlinico "Umberto I", Università di Roma	Viale del Policlinico, 155 00161 Rome	+39 06 4997 8000	
Italy	Centro Antiveleni di Firenze Az. Osp. "Careggi" U.O. Tossicologia Medica, S.O.D. di Tossicologia Clinica e Tossicologia Clinica	Largo Brambilla, 3 50134 Florence	+39 055 794 7819	
Italy	Centro Antiveleni di Pavia CAV Centro Nazionale di Informazione Tossicologica, Istituti Clinici Scientifici Maugeri Spa	Via Salvatore Maugeri, 10 27100 Pavia	+39 03 822 4444	
Italy	Centro Antiveleni di Roma CAV "Osp. Pediatrico Bambino Gesù" Dip. Emergenza e Accettazione DEA	Piazza Sant'Onofrio, 4 00165	+39 06 6859 3726	
Italy	Centro Antiveleni di Foggia Az. Osp. Univ. Foggia	Viale Europa, n.12 71122 Foggia	+39 800 183 459	
Italy	Centro Antiveleni di Napoli Az. Osp. "A. Cardarelli"	Via A. Cardarelli, 9 80131	+39 081 54 53 333	
Italy	Centro Antiveleni di Verona Azienda Ospedaliera Integrata Verona	Piazzale Aristide Stefani, 1 37126	+39 800 011 858	

FIS EM PLUS 390/585/1500 S Component A (Mortar)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Corr. 1C	H314
Eye Dam. 1	H318
Skin Sens. 1	H317
Muta. 2	H341
Repr. 1B	H360F
STOT SE 3	H335
Aquatic Chronic 2	H411

Full text of hazard classes, H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Contains

: reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700);
reaction product: bisphenol-F-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700);
trimethylolpropane triglycidyl ether; [3-(2,3-epoxypropoxy)propyl]trimethoxysilane; portland cement

Hazard statements (CLP)

: H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H335 - May cause respiratory irritation.
H341 - Suspected of causing genetic defects.
H360F - May damage fertility.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP)

: P201 - Obtain special instructions before use.
P280 - Wear protective gloves, protective clothing, eye protection.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.

2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Component	
trimethylolpropane triglycidyl ether (30499-70-8)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
portland cement (65997-15-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

FIS EM PLUS 390/585/1500 S Component A (Mortar)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
portland cement	CAS-No.: 65997-15-1 EC-No.: 266-043-4	30 – 40	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight $\leq$ 700)	CAS-No.: 25068-38-6 EC-No.: 500-033-5 EC Index-No.: 603-074-00-8 REACH-no: 01-2119456619-26	30 – 40	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
reaction product: bisphenol-F-(epichlorhydrin) Epoxy resin (number average molecular weight $\leq$ 700)	CAS-No.: 9003-36-5 EC-No.: 500-006-8 REACH-no: 01-2119454392-40	10 – 15	Skin Irrit. 2, H315 Skin Sens. 1A, H317 Aquatic Chronic 2, H411
trimethylolpropane triglycidyl ether	CAS-No.: 30499-70-8	10 – 15	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360F Aquatic Chronic 2, H411
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	CAS-No.: 2530-83-8 EC-No.: 219-784-2 REACH-no: 01-2119513212-58	5 – 10	Eye Dam. 1, H318 Aquatic Chronic 3, H412

Specific concentration limits:

Name	Product identifier	Specific concentration limits
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight $\leq$ 700)	CAS-No.: 25068-38-6 EC-No.: 500-033-5 EC Index-No.: 603-074-00-8 REACH-no: 01-2119456619-26	(5 $\leq$ C $\leq$ 100) Eye Irrit. 2, H319 (5 $\leq$ C $\leq$ 100) Skin Irrit. 2, H315

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam.
Unsuitable extinguishing media	: Strong water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
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FIS EM PLUS 390/585/1500 S Component A (Mortar)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

5.3. Advice for firefighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: Do not allow water used to extinguish fire to enter drains, ground or waterways. Avoid direct discharge into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.
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6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Mechanically recover the product.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use. In the event that dust and/or fine particles are generated with this product, it is prudent to minimize prolonged inhalation exposure to these forms not to exceed the occupational exposure limit.
Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing vapours.
Hygiene measures	: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in a well-ventilated place. Keep cool.
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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

FIS EM PLUS 390/585/1500 S Component A (Mortar)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves. Breakthrough time : refer to the recommendations of the supplier. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR), Butyl rubber	2 (> 30 minutes)			

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Light grey.
Appearance	: Paste.
Odour	: slight.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Explosive limits	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: > 100 °C
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not available

FIS EM PLUS 390/585/1500 S Component A (Mortar)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

pH solution	: Not available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: 60 – 120 Pa·s
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.4 – 1.6 g/cm ³
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)

LD50 oral rat	> 2000 mg/kg bodyweight (OECD 402 method)
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reaction product: bisphenol-F-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700) (9003-36-5)

LD50 oral rat	> 5000 mg/kg (OECD 401 method)
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LD50 dermal rat	> 2000 mg/kg (OECD 401 method)
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trimethylolpropane triglycidyl ether (30499-70-8)

LD50 oral rat	3398 mg/kg (OECD 401 method)
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LD50 dermal	> 3170 mg/kg (OECD 402 method)
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[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)

LD50 oral rat	8025 mg/kg
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FIS EM PLUS 390/585/1500 S Component A (Mortar)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)	
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 5.3 mg/l/4h (OECD 403 method)
portland cement (65997-15-1)	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Neither mortality nor clinical signs of toxicity were observed with the given dose
LC50 Inhalation - Rat	> 5 g/m³ Neither mortality nor clinical signs of toxicity were observed with the given dose
Skin corrosion/irritation	: Causes severe skin burns.
portland cement (65997-15-1)	
pH	12
Serious eye damage/irritation	: Causes serious eye damage.
portland cement (65997-15-1)	
pH	12
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Suspected of causing genetic defects.
Carcinogenicity	: Not classified
Reproductive toxicity	: May damage fertility.
STOT-single exposure	: May cause respiratory irritation.
portland cement (65997-15-1)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)	
NOAEL (oral, rat, 90 days)	≥ 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: other:
Aspiration hazard	: Not classified
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)	
Viscosity, kinematic	3.43 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.
Not rapidly degradable

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	
LC50 - Fish [1]	2 mg/l Oncorhynchus mykiss (Rainbow trout)
EC50 - Crustacea [1]	1.8 mg/l Daphnia magna (Water flea)
EC50 72h - Algae [1]	9.1 mg/l
ErC50 algae	11 mg/l
reaction product: bisphenol-F-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700) (9003-36-5)	
LC50 - Fish [1]	2.54 mg/l
EC50 - Crustacea [1]	2.55 mg/l Daphnia magna (Water flea)
EC50 72h - Algae [1]	> 1.8 mg/l (OECD 201 method)
NOEC chronic crustacea	0.3 mg/l

FIS EM PLUS 390/585/1500 S Component A (Mortar)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

trimethylolpropane triglycidyl ether (30499-70-8)	
LC50 - Fish [1]	75 mg/l (OECD 203 method)
EC50 - Crustacea [1]	3.7 mg/l
ErC50 algae	9 mg/l
NOEC chronic algae	2.5 mg/l Pseudokirchneriella subcapitata (OECD 201 method)
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)	
LC50 - Fish [1]	55 mg/l Cyprinus carpio (Common carp)
EC50 - Crustacea [1]	324 mg/l Daphnia magna (Water flea)
EC50 72h - Algae [1]	255 mg/l
LOEC (chronic)	> 100 mg/l Daphnia magna (Water flea) - 21 d
NOEC (chronic)	≥ 100 mg/l Daphnia magna (Water flea) - 21 d
NOEC chronic crustacea	≥ 100 mg/l Daphnia magna (Water flea) (OECD 202 method)

12.2. Persistence and degradability

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	
Biodegradation	12 % 28 d (OECD-Methode 302B)
trimethylolpropane triglycidyl ether (30499-70-8)	
Biodegradation	25 % (OECD 302B method)

12.3. Bioaccumulative potential

reaction product: bisphenol-F-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700) (9003-36-5)	
Partition coefficient n-octanol/water (Log Pow)	3.6 (OECD 117 method)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component	
trimethylolpropane triglycidyl ether (30499-70-8)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
portland cement (65997-15-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Only pass on empty containers/packaging for recycling.
Additional information	: Not classified as hazardous waste when part A and part B are mixed and are fully cured.
European List of Waste (LoW) code	: 08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances 20 01 27* - paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

FIS EM PLUS 390/585/1500 S Component A (Mortar)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA
14.1. UN number or ID number		
UN 1759	UN 1759	UN 1759
14.2. UN proper shipping name		
CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidyl ether)	CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidyl ether)	Corrosive solid, n.o.s. (trimethylolpropane triglycidyl ether)
Transport document description		
UN 1759 CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidyl ether), 8, III, (E), ENVIRONMENTALLY HAZARDOUS	UN 1759 CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidyl ether), 8, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 1759 Corrosive solid, n.o.s. (trimethylolpropane triglycidyl ether), 8, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)		
8 	8 	8 
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes
No supplementary information available		

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: C10
Special provisions (ADR)	: 274
Limited quantities (ADR)	: 5kg
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P002, IBC08, LP02, R001
Special packing provisions (ADR)	: B3
Mixed packing provisions (ADR)	: MP10
Transport category (ADR)	: 3
Orange plates	: 

Tunnel restriction code (ADR) : E

Transport by sea

Special provisions (IMDG)	: 223, 274
Limited quantities (IMDG)	: 5 kg
Packing instructions (IMDG)	: P002, LP02
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Properties and observations (IMDG)	: Causes burns to skin, eyes and mucous membranes.

Air transport

PCA packing instructions (IATA)	: 860
PCA max net quantity (IATA)	: 25kg
CAO packing instructions (IATA)	: 864
CAO max net quantity (IATA)	: 100kg
Special provisions (IATA)	: A3, A803
ERG code (IATA)	: 8L

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

FIS EM PLUS 390/585/1500 S Component A (Mortar)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose

FIS EM PLUS 390/585/1500 S Component A (Mortar)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
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.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H360F	May damage fertility.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Muta. 2	Germ cell mutagenicity, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

FIS EM PLUS 390/585/1500 S Component A (Mortar)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Skin Corr. 1C	H314	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
Muta. 2	H341	Calculation method
Repr. 1B	H360F	Calculation method
STOT SE 3	H335	Calculation method
Aquatic Chronic 2	H411	Calculation method

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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

1.1. Product identifier

Product form : Mixture
Trade name : FIS EM PLUS 390/585/1500 S Component B (Hardener)
UFI : MK20-COG0-800F-PKW9

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

1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use
Use of the substance/mixture : composite mortar

1.2.2. Uses advised against

Restrictions on use : Observe technical data sheet, Restricted to professional users

1.3. Details of the supplier of the safety data sheet

Manufacturer

fischerwerke GmbH & Co. KG
Klaus-Fischer-Straße, 1
72178 Waldachtal
Germany
T +49(0)7443 12-0 - F +49(0)7443 12-4222
info-sdb@fischer.de - www.fischer.de

Distributor

fischer Italia S.r.l Unipersonale
Corso Stati Uniti, 25
35127 Padova Z.I. Sud
Italy
T +39 04 98 06 31 11 - F +39 04 98 06 34 01
sercli@fischeritalia.it - www.fischeritalia.it

1.4. Emergency telephone number

Emergency number : +49(0)6132-84463 (24h)

Country	Organisation/Company	Address	Emergency number	Comment
Italy	Centro Antiveleni di Bergamo Azienda Ospedaliera Papa Giovanni XXII	Piazza OMS - Organizzazione Mondiale della Sanità, 1 24127 Bergamo	+39 800 88 33 00	
Italy	Centro Antiveleni di Milano Ospedale Niguarda Ca' Granda	Piazza Ospedale Maggiore 3 20162 Milan	+39 02 6610 1029	
Italy	Centro Antiveleni di Roma CAV Policlinico "A. Gemelli", Dipartimento di Tossicologia Clinica Universita Cattolica del Sacro Cuore	Largo Agostino Gemelli, 8 00168 Rome	+39 06 305 4343	
Italy	Centro Antiveleni di Roma CAV Policlinico "Umberto I", Università di Roma	Viale del Policlinico, 155 00161 Rome	+39 06 4997 8000	
Italy	Centro Antiveleni di Firenze Az. Osp. "Careggi" U.O. Tossicologia Medica, S.O.D. di Tossicologia Clinica Clinica	Largo Brambilla, 3 50134 Florence	+39 055 794 7819	
Italy	Centro Antiveleni di Pavia CAV Centro Nazionale di Informazione Tossicologica, Istituti Clinici Scientifici Maugeri Spa	Via Salvatore Maugeri, 10 27100 Pavia	+39 03 822 4444	
Italy	Centro Antiveleni di Roma CAV "Osp. Pediatrico Bambino Gesù" Dip. Emergenza e Accettazione DEA	Piazza Sant'Onofrio, 4 00165	+39 06 6859 3726	
Italy	Centro Antiveleni di Foggia Az. Osp. Univ. Foggia	Viale Europa, n.12 71122 Foggia	+39 800 183 459	
Italy	Centro Antiveleni di Napoli Az. Osp. "A. Cardarelli"	Via A. Cardarelli, 9 80131	+39 081 54 53 333	
Italy	Centro Antiveleni di Verona Azienda Ospedaliera Integrata Verona	Piazzale Aristide Stefani, 1 37126	+39 800 011 858	

FIS EM PLUS 390/585/1500 S Component B (Hardener)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Corr. 1B	H314
Eye Dam. 1	H318
Skin Sens. 1	H317
STOT SE 3	H335
Aquatic Chronic 3	H412

Full text of hazard classes, H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Contains

: m-phenylenebis(methylamine); 2,4,6-tris(dimethylaminomethyl)phenol; portland cement

Hazard statements (CLP)

: H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H335 - May cause respiratory irritation.
H412 - Harmful to aquatic life with long lasting effects.
P201 - Obtain special instructions before use.
P280 - Wear protective gloves, eye protection, protective clothing.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.

Extra phrases

: Restricted to professional users.

2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Component	
m-phenylenebis(methylamine) (1477-55-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
benzyl alcohol (100-51-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
aliphatic polyamine	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
portland cement (65997-15-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

FIS EM PLUS 390/585/1500 S Component B (Hardener)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
m-phenylenebis(methylamine)	CAS-No.: 1477-55-0 EC-No.: 216-032-5 REACH-no: 01-2119480150-50	30 – 40	Acute Tox. 4 (Oral), H302 (ATE=930 mg/kg bodyweight) Acute Tox. 4 (Inhalation:dust,mist), H332 (ATE=2.4 mg/l/4h) Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412 EUH071
portland cement	CAS-No.: 65997-15-1 EC-No.: 266-043-4	30 – 40	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
aliphatic polyamine	-	15 – 25	Aquatic Chronic 4, H413
benzyl alcohol	CAS-No.: 100-51-6 EC-No.: 202-859-9 EC Index-No.: 603-057-00-5 REACH-no: 01-2119492630-38	2.5 – 10	Acute Tox. 4 (Oral), H302 (ATE=1580 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Eye Irrit. 2, H319
2,4,6-tris(dimethylaminomethyl)phenol	CAS-No.: 90-72-2 EC-No.: 202-013-9 EC Index-No.: 603-069-00-0 REACH-no: 01-2119560597-27	2.5 – 5	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Corr. 1, H314 Eye Dam. 1, H318

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam.
Unsuitable extinguishing media	: Strong water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
--	--------------------------------

5.3. Advice for firefighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: Do not allow water used to extinguish fire to enter drains, ground or waterways. Avoid direct discharge into drains.

FIS EM PLUS 390/585/1500 S Component B (Hardener)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use. In the event that dust and/or fine particles are generated with this product, it is prudent to minimize prolonged inhalation exposure to these forms not to exceed the occupational exposure limit.

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing vapours.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

FIS EM PLUS 390/585/1500 S Component B (Hardener)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves. Breakthrough time : refer to the recommendations of the supplier. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR), Butyl rubber	2 (> 30 minutes)			

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Black.
Odour	: Amine-like.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Explosive limits	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: 80 – 180 Pa·s
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.35 – 1.45 g/cm ³
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable

FIS EM PLUS 390/585/1500 S Component B (Hardener)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Particle size : Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

m-phenylenebis(methylamine) (1477-55-0)	
LD50 oral rat	930 mg/kg
LD50 dermal rat	> 3100 mg/kg bodyweight
LC50 Inhalation - Rat (Dust/Mist)	2.4 mg/l/4h
benzyl alcohol (100-51-6)	
LD50 oral	1580 mg/kg bodyweight mouse (OECD 401 method)
LD50 dermal rabbit	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat	> 4178 mg/l/4h (OECD 403 method)
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
LD50 oral rat	2169 mg/kg bodyweight (OECD 401 method)
portland cement (65997-15-1)	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Neither mortality nor clinical signs of toxicity were observed with the given dose
LC50 Inhalation - Rat	> 5 g/m³ Neither mortality nor clinical signs of toxicity were observed with the given dose
Skin corrosion/irritation	: Causes severe skin burns.
portland cement (65997-15-1)	
pH	12
Serious eye damage/irritation	: Causes serious eye damage.

FIS EM PLUS 390/585/1500 S Component B (Hardener)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

portland cement (65997-15-1)	
pH	12
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
portland cement (65997-15-1)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
benzyl alcohol (100-51-6)	
NOAEL (oral, rat, 90 days)	400 mg/kg bodyweight/day (OECD 451 method)
Aspiration hazard	: Not classified
benzyl alcohol (100-51-6)	
Viscosity, kinematic	0.005 mm²/s

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.
Not rapidly degradable

m-phenylenebis(methylamine) (1477-55-0)	
LC50 - Fish [1]	87.6 mg/l Oryzias latipes (Ricefish)
EC50 - Crustacea [1]	15.2 mg/l Daphnia magna (Water flea)
EC50 72h - Algae [1]	20.3 mg/l Pseudokirchneriella subcapitata
EC50 72h - Algae [2]	33.3 mg/l Pseudokirchneriella subcapitata
LOEC (chronic)	15 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	4.7 mg/l Daphnia magna (Water flea)
NOEC chronic crustacea	4.7 mg/l Daphnia magna (Water flea)
benzyl alcohol (100-51-6)	
LC50 - Fish [1]	460 mg/l Pimephales promelas
EC50 - Crustacea [1]	230 mg/l Daphnia magna (Water flea)
EC50 72h - Algae [1]	770 mg/l Pseudokirchneriella subcapitata
EC50 72h - Algae [2]	500 mg/l Pseudokirchneriella subcapitata
NOEC chronic fish	48.9 mg/l
NOEC chronic crustacea	51 mg/l Daphnia magna (Water flea)
NOEC chronic algae	310 mg/l Desmodesmus subspicatus
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
LC50 - Fish [1]	> 100 mg/l Cyprinus carpio (Common carp)
EC50 - Crustacea [1]	> 100 mg/l Daphnia magna (Water flea)
EC50 72h - Algae [1]	84 mg/l (OECD 201 method)
NOEC (chronic)	2 mg/l

12.2. Persistence and degradability

No additional information available

FIS EM PLUS 390/585/1500 S Component B (Hardener)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component	
m-phenylenebis(methylamine) (1477-55-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
benzyl alcohol (100-51-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
aliphatic polyamine	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
portland cement (65997-15-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Only pass on empty containers/packaging for recycling.
Additional information	: Not classified as hazardous waste when part A and part B are mixed and are fully cured.
European List of Waste (LoW) code	: 08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances 20 01 27* - paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number or ID number		
UN 3259	UN 3259	UN 3259
14.2. UN proper shipping name		
AMINES, SOLID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine))	AMINES, SOLID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine))	Amines, solid, corrosive, n.o.s. (m-phenylenebis(methylamine))
Transport document description		
UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine)), 8, II, (E)	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (m-phenylenebis(methylamine)), 8, II	UN 3259 Amines, solid, corrosive, n.o.s. (m-phenylenebis(methylamine)), 8, II
14.3. Transport hazard class(es)		
8 	8 	8 
14.4. Packing group		
II	II	II

FIS EM PLUS 390/585/1500 S Component B (Hardener)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available		

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: C8
Special provisions (ADR)	: 274
Limited quantities (ADR)	: 1kg
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P002, IBC08
Special packing provisions (ADR)	: B4
Mixed packing provisions (ADR)	: MP10
Transport category (ADR)	: 2
Special provisions for carriage - Packages (ADR)	: V11
Orange plates	:



Tunnel restriction code (ADR)	: E
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Transport by sea

Special provisions (IMDG)	: 274
Limited quantities (IMDG)	: 1 kg
Packing instructions (IMDG)	: P002
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Properties and observations (IMDG)	: Colourless to yellowish solids with a pungent odour. Miscible with or soluble in water. When involved in a fire, evolve toxic gases. Corrosive to most metals, especially to copper and its alloys. Cause burns to skin, eyes and mucous membranes. React violently with acids.

Air transport

PCA packing instructions (IATA)	: 859
PCA max net quantity (IATA)	: 15kg
CAO packing instructions (IATA)	: 863
CAO max net quantity (IATA)	: 50kg
Special provisions (IATA)	: A3, A803
ERG code (IATA)	: 8L

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

FIS EM PLUS 390/585/1500 S Component B (Hardener)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit

FIS EM PLUS 390/585/1500 S Component B (Hardener)

Safety Data Sheet

*** DRAFT ***

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
EUH071	Corrosive to the respiratory tract.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
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.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Skin Corr. 1B	H314	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
STOT SE 3	H335	Calculation method
Aquatic Chronic 3	H412	Calculation method

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.