

### SECTION 1: Kit identification

#### 1.1 Kit identifier

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

Product code : 544163

#### 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](mailto:info-sdb@fischer.de) - [www.fischer.de](http://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<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>Muta. 2, H341<br>Repr. 1B, H360F<br>STOT SE 3, H335<br>Aquatic Chronic 2, H411 |
| FIS EM PLUS 390/585/1500 S Component B (Hardener) | Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>STOT SE 3, H335<br>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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#### 1.4. Emergency telephone number

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

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

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

## Safety Data Sheet

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  $\leq 700$ );  
reaction product: bisphenol-F-(epichlorhydrin) Epoxy resin (number average molecular weight  $\leq 700$ );  
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<br>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<br>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)

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

#### Specific concentration limits:

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

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

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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. |
|----------------------|----------------------------------------------------------------------------------------------------------------|

#### 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

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

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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  |
| 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  |
| pH solution               | : Not available  |

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

## Safety Data Sheet

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

|                                                 |                               |
|-------------------------------------------------|-------------------------------|
| 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 <sup>3</sup> |
| 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) |
|---------------|-------------------------------------------|

**reaction product: bisphenol-F-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700) (9003-36-5)**

|               |                                |
|---------------|--------------------------------|
| LD50 oral rat | > 5000 mg/kg (OECD 401 method) |
|---------------|--------------------------------|

|                 |                                |
|-----------------|--------------------------------|
| LD50 dermal rat | > 2000 mg/kg (OECD 401 method) |
|-----------------|--------------------------------|

**trimethylolpropane triglycidyl ether (30499-70-8)**

|               |                              |
|---------------|------------------------------|
| LD50 oral rat | 3398 mg/kg (OECD 401 method) |
|---------------|------------------------------|

|             |                                |
|-------------|--------------------------------|
| LD50 dermal | > 3170 mg/kg (OECD 402 method) |
|-------------|--------------------------------|

**[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)**

|               |            |
|---------------|------------|
| LD50 oral rat | 8025 mg/kg |
|---------------|------------|

|                    |              |
|--------------------|--------------|
| LD50 dermal rabbit | > 2000 mg/kg |
|--------------------|--------------|

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

## Safety Data Sheet

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

| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8) |                                                                                                                                                                                                                                                              |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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

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<br>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<br>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<br>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

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

| ADR                                                                                                            | IMDG                                                                                                                       | IATA                                                                                                      |
|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| <b>14.1. UN number or ID number</b>                                                                            |                                                                                                                            |                                                                                                           |
| UN 1759                                                                                                        | UN 1759                                                                                                                    | UN 1759                                                                                                   |
| <b>14.2. UN proper shipping name</b>                                                                           |                                                                                                                            |                                                                                                           |
| CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidyl ether)                                                 | CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidyl ether)                                                             | Corrosive solid, n.o.s. (trimethylolpropane triglycidyl ether)                                            |
| <b>Transport document description</b>                                                                          |                                                                                                                            |                                                                                                           |
| 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 |
| <b>14.3. Transport hazard class(es)</b>                                                                        |                                                                                                                            |                                                                                                           |
| 8<br>                         | 8<br>                                     | 8<br>                  |
| <b>14.4. Packing group</b>                                                                                     |                                                                                                                            |                                                                                                           |
| III                                                                                                            | III                                                                                                                        | III                                                                                                       |
| <b>14.5. Environmental hazards</b>                                                                             |                                                                                                                            |                                                                                                           |
| Dangerous for the environment: Yes                                                                             | Dangerous for the environment: Yes<br>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

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

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

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

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

## Safety Data Sheet

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.  
: Restricted to professional users.

Precautionary statements (CLP)

Extra phrases

#### 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<br>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<br>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<br>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<br>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)

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### 3.2. Mixtures

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

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### 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)

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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                 |
| 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 <sup>3</sup> |
| Relative density                                | : Not available                 |
| Relative vapour density at 20°C                 | : Not applicable                |
| Particle size                                   | : Not available                 |

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### 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. |

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| 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

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### 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<br>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<br>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<br>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<br>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<br>20 01 27* - paint, inks, adhesives and resins containing dangerous substances |

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

| ADR                                                                                      | IMDG                                                                                     | IATA                                                                                       |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| <b>14.1. UN number or ID number</b>                                                      |                                                                                          |                                                                                            |
| UN 3259                                                                                  | UN 3259                                                                                  | UN 3259                                                                                    |
| <b>14.2. UN proper shipping name</b>                                                     |                                                                                          |                                                                                            |
| 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))                             |
| <b>Transport document description</b>                                                    |                                                                                          |                                                                                            |
| 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              |
| <b>14.3. Transport hazard class(es)</b>                                                  |                                                                                          |                                                                                            |
| 8<br> | 8<br> | 8<br> |
| <b>14.4. Packing group</b>                                                               |                                                                                          |                                                                                            |
| II                                                                                       | II                                                                                       | II                                                                                         |

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| ADR                                    | IMDG                                                      | IATA                              |
|----------------------------------------|-----------------------------------------------------------|-----------------------------------|
| <b>14.5. Environmental hazards</b>     |                                                           |                                   |
| Dangerous for the environment: No      | Dangerous for the environment: No<br>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 |
|-------------------------------|-----|

#### 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)

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### 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                                                                          |

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| 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.