

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Komponente A (Mörtel)

fischer 
innovative solutions

Revision date : 09.08.2019

Version : 2.0 /en

Print date : 09.08.2019

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

1.1 Product identifier

Commercial Product Name FIS EP 390/585 S Komponente A (Mörtel)

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

Relevant identified uses composite mortar

Recommended restrictions None under normal processing. Observe technical data sheet.

1.3 Details of the supplier of the safety data sheet

Company designation fischerwerke GmbH & Co. KG
Klaus-Fischer-Straße 1
D-72178 Waldachtal
Telephone : +49(0)7443 12-0
FAX : +49(0)7443 12-4222
Email : info-sdb@fischer.de
Internet : www.fischer.de

Marketer Great Britain: Mrs Mirka Valovicova, fischer Fixing (UK) Ltd, Hithercroft Road, Wallingford, Oxfordshire, OX10 9AT, Tel. 01491 827 920, Fax 01491 827 950 / Singapore: fischer systems Asia Pte. Ltd., 4 Kaki Bukit Ave. 1 #01-06, 417939 Singapore, Tel (65) 6741 0480 Fax (65) 6741 0481
www.fischer.sg
Telephone :
FAX :
Email :
Internet :

1.4 Emergency telephone number

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 STOT SE 3; H335 Aquatic Chronic 2; H411

2.2 Label elements

Hazard pictogram



GHS05



GHS07



GHS09

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Komponente A (Mörtel)



Revision date : 09.08.2019

Version : 2.0 /en

Print date : 09.08.2019

Signal word	Danger
Hazardous component(s) to be indicated on label	portland cement , Reaction product: bisphenol F-epichlorohydrin resins with average molecular weight <= 700 , reaction product: bisphenol-A-(epichlorohydrin); epoxy resin (number average molecular weight <= 700) , 1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane
H-statement(s)	H315: Causes skin irritation. H317: May cause an allergic skin reaction. H318: Causes serious eye damage. H335: May cause respiratory irritation. H411: Toxic to aquatic life with long lasting effects.
P-statement(s)	P201: Obtain special instructions before use. P280: Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or 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/doctor/ .

2.3 Other hazards

Health hazard	None known.
Particular information pertaining specific risk for human / environment	None known.
Indication of danger	None known.
Hazard precautions	None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

Ingredient	CAS No.	Classification (EC) 1272/2008	Concentration
portland cement	CAS No. : 65997-15-1 EC-No. : 266-043-4 REACH No. : The substance does not require registration according to Regulation (EC) No 1907/2006 [REACH].	Skin Irrit. 2;H315 Eye Dam. 1; H318 STOT SE 3;H335	>= 50.0 % by weight
Reaction product: bisphenol F-epichlorohydrin resins with average molecular weight <= 700	CAS No. : 28064-14-4 EC-No. : 608-164-0 REACH No. : 01-2119454392-40	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Skin Sens. 1; H317 Aquatic Chronic 2; H411	10.0 - 25.0 % by weight
reaction product: bisphenol-A-(epichlorohydrin); epoxy resin (number aver-	CAS No. : 25068-38-6 EC-No. : 500-033-5 Index-No. : 603-074-00-8	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Skin Sens. 1; H317 Aquatic Chronic 2; H411	10.0 - 25.0 % by weight

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Komponente A (Mörtel)



Revision date : 09.08.2019

Version : 2.0 /en

Print date : 09.08.2019

Ingredient	CAS No.	Classification (EC) 1272/2008	Concentration
age molecular weight <= 700)	REACH No. : 01-2119456619-26		
benzyl alcohol	CAS No. : 100-51-6 EC-No. : 202-859-9 Index-No. : 603-057-00-5 REACH No. : 01-2119492630-38	Acute Tox. 4 ; H332 Acute Tox. 4 ; H302	2.5 - 10.0 % by weight
1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	CAS No. : 17557-23-2 EC-No. : 241-536-7 Index-No. : 603-094-00-7 REACH No. : 01-2120759332-55	Skin Irrit. 2; H315 Skin Sens. 1; H317	2.5 - 10.0 % by weight

SECTION 4: First aid measures

4.1 Description of first aid measures

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

4.2 Most important symptoms and effects, both acute and delayed

Symptoms None known.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate medical attention No data available

Special medical treatment No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Dry powder
Foam
Carbon dioxide (CO₂)
Water spray jet

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Komponente A (Mörtel)



Revision date : 09.08.2019

Version : 2.0 /en

Print date : 09.08.2019

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

5.2 Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases Hazardous decomposition products formed under fire conditions.
Sulphur oxides
nitrogen oxides (NOx)
Carbon oxides

5.3 Advice for firefighters

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

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

Reference to other sections See chapter: 8/13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling None under normal processing.

Precautions Observe label precautions.

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

7.2 Conditions for safe storage, including any incompatibilities

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

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Komponente A (Mörtel)



Revision date : 09.08.2019

Version : 2.0 /en

Print date : 09.08.2019

Hints on storage assembly

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

Storage specifications

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

7.3 Specific end use(s)

Specific use(s)

composite mortar
Further information: see technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

portland cement

Great Britain

Long-term exposure value/ mg/m ³	Remarks	Source
10	inhalable dust	Company data
4	respirable dust	Company data

8.2 Exposure controls

Respiratory protection

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

Hand protection

Suitable material

butyl-rubber, Fluorinated rubber, Nitrile rubber

Break through time

> 120 min

Remarks

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

Note

Replace when worn.

Eye protection

Safety glasses

Skin and body protection

Wear suitable protective equipment.

General protective and hygiene measures

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

Information on environmental protection regulations

No special environmental precautions required.

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Komponente A (Mörtel)

Revision date : 09.08.2019

Version : 2.0 /en

Print date : 09.08.2019

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	Paste
Colour	white
Odour	characteristic
pH	not determined
Melting point [°C] / Freezing point [°C]	not determined
Boiling point [°C]	not determined
Flash point [°C]	> 100
Evaporation rate [kg/(s*m ²)]	No data available
Flammability (solid, gas)	No data available
Explosion limits [Vol-%]	
Lower limit	not determined
Upper limit	not determined
Vapour pressure [kPa]	No data available
Density [g/cm ³]	1,9
Temperature	20°C
Water solubility [g/l]	not determined
Partition coefficient n-octanol /water (log P O/W)	not determined
Autoignition temperature [°C]	not determined
Decomposition temperature [°C]	not determined
Viscosity, dynamic [kg/(m*s)]	150 - 250
Temperature	20°C
Risk of explosion.	Not explosive

9.2 Other information

Ignition temperature [°C]	not determined
Oxidizing properties	no

SECTION 10: Stability and reactivity

10.1 Reactivity

Thermal decomposition	No decomposition if stored and applied as directed.
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Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Komponente A (Mörtel)



Revision date : 09.08.2019

Version : 2.0 /en

Print date : 09.08.2019

10.2 Chemical stability

Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

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

10.4 Conditions to avoid

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

10.5 Incompatible materials

Materials to avoid Strong acids and oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products None reasonably foreseeable.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Oral toxicity [mg/kg]

Hazardous ingredients

portland cement			
Value	Test criterion	Remarks	Source
> 2000	LD50	literature value	Company data

Reaction product: bisphenol F-epichlorohydrin resins with average molecular weight <= 700			
Value	Test criterion	Test species	Source
> 5000	LD50	rat	Company data

reaction product: bisphenol-A-(epichlorohydrin); epoxy resin (number average molecular weight <= 700)			
Value	Test criterion	Test species	Source
30000	LD50	rat	Company data

benzyl alcohol			
Value	Test criterion	Test species	Source
1230	LD50	Rat	Company data

1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane			
Value	Test criterion	Test species	Source
> 2000	LD50		Company data

Dermal toxicity [mg/kg]

Hazardous ingredients

portland cement				
Value	Test criterion	Test species	Remarks	Source

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Komponente A (Mörtel)



Revision date : 09.08.2019

Version : 2.0 /en

Print date : 09.08.2019

> 2000	LD50	rabbit	Limit test 2000 mg/kg	Company data
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Reaction product: bisphenol F-epichlorohydrin resins with average molecular weight <= 700			
Value	Test criterion	Test species	Source
> 2000	LD50	rat	Company data

reaction product: bisphenol-A-(epichlorohydrin); epoxy resin (number average molecular weight <= 700)			
Value	Test criterion	Test species	Source
> 2000	LD50	rat	Company data

benzyl alcohol			
Value	Test criterion	Test species	Source
2000	LD50	rabbit	Company data

1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	
Value	Source
no data available	Company data

Inhalative toxicity [mg/l]

Hazardous ingredients

portland cement				
Value	Test criterion	Test species	Note	Source
> 5	LC50	rat	Limit Test 5 g/m ³	Company data

Reaction product: bisphenol F-epichlorohydrin resins with average molecular weight <= 700	
Value	Source
An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.	Company data

reaction product: bisphenol-A-(epichlorohydrin); epoxy resin (number average molecular weight <= 700)				
Value	Test criterion	Test species	Exposure duration	Source
0,000008	LC0	rat	5 h	Company data
An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.				Company data

benzyl alcohol					
Value	Test criterion	Test species	Note	Exposure duration	Source

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Komponente A (Mörtel)

Revision date : 09.08.2019

Version : 2.0 /en

Print date : 09.08.2019

> 4,1	LC50	rat	OECD 403	4 h	Company data
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1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	
Value	Source
no data available	Company data

Irritant effect on skin Irritating to skin and mucous membranes

Irritant effect on eyes Risk of serious damage to eyes.

Irritant effect on the respiratory tract**Hazardous ingredients**

portland cement	
Value	Source
Based on available data, the classification criteria are not met.	Company data

Sensitization There is no data available for this product.

Carcinogenic effects No data available

Mutagenicity There is no data available for this product.

Reproduction toxicity There is no data available for this product.

Caustic effect Causes severe skin burns and eye damage.

Specific target organ toxicity (single exposure) [mg/kg]**Hazardous ingredients**

portland cement	
Specific effects	Source
Irritating to respiratory system. (dust)	Company data

Reaction product: bisphenol F-epichlorohydrin resins with average molecular weight <= 700	
Remarks	Source
Not applicable.	Company data

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	
Remarks	Source
Not applicable.	Company data

benzyl alcohol	
Remarks	Source
No data available	Company data

1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	
Remarks	Source
No data available	Company data

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Komponente A (Mörtel)



Revision date : 09.08.2019

Version : 2.0 /en

Print date : 09.08.2019

Specific target organ toxicity (repeated exposure) [mg/kg]

Hazardous ingredients

portland cement	
Remarks	Source
*1)	Company data

*1): Based on available data, the classification criteria are not met.

Reaction product: bisphenol F-epichlorohydrin resins with average molecular weight <= 700	
Remarks	Source
Not applicable.	Company data

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	
Remarks	Source
Not applicable.	Company data

benzyl alcohol	
Remarks	Source
No data available	Company data

1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	
Remarks	Source
No data available	Company data

11.2 Additional information

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

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish [mg/l]

Hazardous ingredients

portland cement		
Value	Test criterion	Source
> 100	LC50	Company data

Reaction product: bisphenol F-epichlorohydrin resins with average molecular weight <= 700				
Value	Test criterion	Measuring method	Exposure duration	Source
> 1	LC50	OECD Test Guideline 203	96 h	Company data

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)				
Value	Test criterion	Measuring method	Exposure duration	Source
1,3	LC50	OECD Test Guideline 203	96 h	Company data

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Komponente A (Mörtel)

Revision date : 09.08.2019

Version : 2.0 /en

Print date : 09.08.2019

benzyl alcohol				
Value	Test criterion	Test species	Exposure duration	Source
460	LC50	Pimephales promelas (fat-head minnow)	96 h	Company data

1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane				
Value	Test criterion	Test species	Exposure duration	Source
101	LC50	Fish (mg/l)	96 h	CLP

Toxicity to daphnia [mg/l]**Hazardous ingredients**

portland cement				
Value	Test criterion	Test species	Exposure duration	Source
> 100	LC50	Daphnia magna (Water flea)		Company data

Reaction product: bisphenol F-epichlorohydrin resins with average molecular weight <= 700					
Value	Test criterion	Test species	Exposure duration	Measuring method	Source
> 1	EC50	Daphnia magna (Water flea)	48 h	OECD Test Guideline 202	Company data

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)					
Value	Test criterion	Test species	Exposure duration	Exposure duration	Source
1,8	EC50	Daphnia magna (Water flea)	48 h		Company data

benzyl alcohol				
Value	Test criterion	Test species	Exposure duration	Source
230	EC50	Daphnia magna (Water flea)	48 h	Company data

1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane				
Value	Test criterion	Test species	Exposure duration	Source
47	EC50	Daphnia magna (Big water flea)	48 h	CLP

Toxicity to algae [mg/l]**Hazardous ingredients**

portland cement		
Value	Test criterion	Source
> 100	EC50	Company data

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Komponente A (Mörtel)

Revision date : 09.08.2019

Version : 2.0 /en

Print date : 09.08.2019

Reaction product: bisphenol F-epichlorohydrin resins with average molecular weight <= 700			
Value	Test criterion	Exposure duration	Source
> 1	EC50	72 h	Company data

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)				
Value	Test criterion	Test species	Exposure duration	Source
10	EC50	Chlorella pyrenoidosa	72 h	Company data

benzyl alcohol				
Value	Test criterion	Test species	Exposure duration	Source
700	IC50:	Pseudokirchneriella subcapitata	72 h	Company data

1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane				
Value	Test criterion	Test species	Exposure duration	Source
1073	EC50	Algae (mg/l)	96 h	CLP

NOEC (daphnia) [mg/l]**Hazardous ingredients**

Reaction product: bisphenol F-epichlorohydrin resins with average molecular weight <= 700				
Value	Test species	Measuring method	Exposure duration	Source
0,3	Daphnia magna (Big water flea)	OECD 211	21 d	Company data

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)				
Value	Test species	Measuring method	Exposure duration	Source
0,3	Daphnia magna (Big water flea)	OECD 211	21 d	Company data

benzyl alcohol				
Value	Test species	Measuring method	Exposure duration	Source
51	Daphnia magna (Big water flea)	OECD 211	21 d	Company data

12.2 Persistence and degradability

Elimination and distribution mechanisms There is no data available for this product.

Elimination in purification plant There is no data available for this product.

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Komponente A (Mörtel)



Revision date : 09.08.2019

Version : 2.0 /en

Print date : 09.08.2019

Biodegradability There is no data available for this product.

12.3 Bioaccumulative potential

Bioaccumulation There is no data available for this product.

Bioconcentration factor (BCF) There is no data available for this product.

12.4 Mobility in soil

Distribution in the environment There is no data available for this product.

Mobility There is no data available for this product.

12.5 Results of PBT and vPvB assessment

Results of PBT characteristics determination This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

12.6 Other adverse effects

Further information on ecology No information on ecology is available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal considerations Dispose of as hazardous waste in compliance with local and national regulations.

Waste Code Product
080409 - waste adhesives and sealants containing organic solvents or other dangerous substances
cured material
200000 - MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS

Uncleaned empty packaging Dispose of as unused product.
Do not flush into surface water or sanitary sewer system.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG	Air transport ICAO/IATA
14.1 UN-No	3077	3077	3077
14.2 Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	Environmentally hazardous substance, solid, n.o.s.
14.3 Transport hazard class(es)	9	9	9
14.4 Packaging group	III	III	III
14.5 Environmental hazards	U - Environmentally hazardous	U - marine pollutant	U - Environmentally hazardous

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Komponente A (Mörtel)

Revision date : 09.08.2019

Version : 2.0 /en

Print date : 09.08.2019

	Land transport ADR/RID	Marine transport IMDG	Air transport ICAO/IATA
Remarks	Limited quantity (LQ): 5 kg	Limited quantity (LQ): 5 kg	
Labels	9  	9  	9  
Risk No.	90		
Category	3		
Classification Code	M7		
14.2 UN proper shipping name		ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	Environmentally hazardous substance, solid, n.o.s.
EmS		F-A;S-F	
Stowage category		A	

14.6 Special precautions for user

Precautions not required under normal use

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL and the IBC Code not applicable

SECTION 15: Regulatory information

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

Restriction of occupation. Do not use for private purposes (household). Reserved for industrial and professional use.

Water Hazard Class (Ger.) 2

Classification in compliance with the Industrial Safety Regulation -

15.2 Chemical safety assessment

Safety assessment Not relevant. Chemical safety assessments for substances in this mixture were not carried out.

Additional regulations This Safety Data Sheet is prepared according to Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

SECTION 16: Other information

Relevant H-phrases
H302: Harmful if swallowed.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Komponente A (Mörtel)



Revision date : 09.08.2019

Version : 2.0 /en

Print date : 09.08.2019

Wording of the hazard classes

H332: Harmful if inhaled.
H335: May cause respiratory irritation.
H411: Toxic to aquatic life with long lasting effects.

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

Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

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

Recommended restrictions None under normal processing. Observe technical data sheet.

Modifications of the previous version are denoted with an asterisk (*).

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

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Component B (Curing agent)



Revision date : 31.07.2019

Version : 1.0 /en

Print date : 31.07.2019

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

1.1 Product identifier

Commercial Product Name FIS EP 390/585 S Component B (Curing agent)

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

Relevant identified uses composite mortar

Recommended restrictions None under normal processing. Observe technical data sheet.

1.3 Details of the supplier of the safety data sheet

Company designation fischerwerke GmbH & Co. KG
Klaus-Fischer-Straße 1
D-72178 Waldachtal
Telephone : +49(0)7443 12-0
FAX : +49(0)7443 12-4222
Email : info-sdb@fischer.de
Internet : www.fischer.de

Marketer Great Britain: Mrs Mirka Valovicova, fischer Fixing (UK) Ltd, Hithercroft Road, Wallingford, Oxfordshire, OX10 9AT, Tel. 01491 827 920, Fax 01491 827 950 / Singapore: fischer systems Asia Pte. Ltd., 4 Kaki Bukit Ave. 1 #01-06, 417939 Singapore, Tel (65) 6741 0480 Fax (65) 6741 0481
www.fischer.sg
Telephone :
FAX :
Email :
Internet :

1.4 Emergency telephone number

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 Skin Corr. 1A; H314 Skin Sens. 1; H317 Aquatic Chronic 3; H412

2.2 Label elements

Hazard pictogram



GHS05



GHS07

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Component B (Curing agent)



Revision date : 31.07.2019

Version : 1.0 /en

Print date : 31.07.2019

Signal word	Danger
Hazardous component(s) to be indicated on label	2-Methyl-1,5-pentandiamin , Phenol, styrenated
H-statement(s)	H314: Causes severe skin burns and eye damage. H317: May cause an allergic skin reaction. H412: Harmful to aquatic life with long lasting effects.
P-statement(s)	P201: Obtain special instructions before use. P280: Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or 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/doctor/ .

2.3 Other hazards

Health hazard	None known.
Particular information pertaining specific risk for human / environment	None known.
Indication of danger	None known.
Hazard precautions	None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

Ingredient	CAS No.	Classification (EC) 1272/2008	Concentration
2-Methyl-1,5-pentandiamin	CAS No. : 15520-10-2 EC-No. : 239-556-6 REACH No. : 01-2119976310-41	Acute Tox. 4; H302 Acute Tox. 4; H312 Acute Tox. 4; H332 Skin Corr. 1A; H314 STOT SE 3; H335 Eye Dam. 1; H318	10.0 - 25.0 % by weight
Phenol, styrenated	CAS No. : 61788-44-1 EC-No. : 262-975-0 REACH No. : 01-2119980970-27	Skin Irrit. 2; H315 Skin Sens. 1; H317 Aquatic Chronic 2; H411	10.0 - 25.0 % by weight

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	If symptoms persist, call a physician. Take off all contaminated clothing immediately. Remove/Take off immediately all contaminated clothing.
If inhaled	Move to fresh air.

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Component B (Curing agent)



Revision date : 31.07.2019

Version : 1.0 /en

Print date : 31.07.2019

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

4.2 Most important symptoms and effects, both acute and delayed

Symptoms None known.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate medical attention No data available

Special medical treatment No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Dry powder
Foam
Carbon dioxide (CO₂)
Water spray jet

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

5.2 Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases Hazardous decomposition products formed under fire conditions.
Sulphur oxides
nitrogen oxides (NO_x)
Carbon oxides

5.3 Advice for firefighters

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

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

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Component B (Curing agent)



Revision date : 31.07.2019

Version : 1.0 /en

Print date : 31.07.2019

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

Reference to other sections See chapter: 8/13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling None under normal processing.

Precautions Observe label precautions.

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

7.2 Conditions for safe storage, including any incompatibilities

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

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

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

7.3 Specific end use(s)

Specific use(s) composite mortar
Further information: see technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Component B (Curing agent)



Revision date : 31.07.2019

Version : 1.0 /en

Print date : 31.07.2019

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls

Respiratory protection	No personal respiratory protective equipment normally required. In case of inadequate ventilation wear respiratory protection.
Hand protection	
Suitable material	butyl-rubber, Fluorinated rubber, Nitrile rubber
Break through time	> 120 min
Remarks	Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Protective gloves complying with EN 374.
Note	Replace when worn.
Eye protection	Safety glasses
Skin and body protection	Wear suitable protective equipment.
General protective and hygiene measures	Avoid contact with the skin and the eyes. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feedingstuffs. Use protective skin cream before handling the product.
Information on environmental protection regulations	No special environmental precautions required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	Paste
Colour	black
Odour	characteristic
pH	not determined
Melting point [°C] / Freezing point [°C]	not determined
Boiling point [°C]	not determined
Flash point [°C]	> 100
Evaporation rate [kg/(s*m ²)]	No data available
Flammability (solid, gas)	No data available

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Component B (Curing agent)



Revision date : 31.07.2019

Version : 1.0 /en

Print date : 31.07.2019

Explosion limits [Vol-%]

Lower limit not determined

Upper limit not determined

Vapour pressure [kPa] No data available

Density [g/cm³] 1,7 - 1,8

Temperature 20°C

Water solubility [g/l] not determined

Partition coefficient n-octanol /water (log P O/W) not determined

Autoignition temperature [°C] not determined

Decomposition temperature [°C] not determined

Viscosity, dynamic [kg/(m*s)] 150 - 220

Temperature 20°C

Risk of explosion. Not explosive

9.2 Other information

Ignition temperature [°C] not determined

Oxidizing properties no

Miscibility with water partly miscible

SECTION 10: Stability and reactivity

10.1 Reactivity

Thermal decomposition No decomposition if stored and applied as directed.

10.2 Chemical stability

Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

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

10.4 Conditions to avoid

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

10.5 Incompatible materials

Materials to avoid Strong acids and oxidizing agents

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Component B (Curing agent)



Revision date : 31.07.2019

Version : 1.0 /en

Print date : 31.07.2019

10.6 Hazardous decomposition products

Hazardous decomposition products: None reasonably foreseeable.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Oral toxicity [mg/kg]

Hazardous ingredients

2-Methyl-1,5-pentandiamin		
Value	Test criterion	Source
1690	LD50	Company data

Phenol, styrenated				
Value	Test criterion	Test species	Remarks	Source
> 2000	LD50	Rat	OECD 423	Company data

Dermal toxicity [mg/kg]

Hazardous ingredients

2-Methyl-1,5-pentandiamin		
Value	Test criterion	Source
1900	LD50	Company data

Phenol, styrenated				
Value	Test criterion	Test species	Remarks	Source
> 2000	LD50	rat	OECD 402	Company data

Inhalative toxicity [mg/l]

Hazardous ingredients

Phenol, styrenated				
Value	Test criterion	Duration of dosage	Test species	Source
4,9	LC0	4 h	rat	Company data

LC50 Inhalation 1h for dusts and sprays [mg/l]

Hazardous ingredients

2-Methyl-1,5-pentandiamin		
Value	Test criterion	Source
4,9	LC50	Company data

Irritant effect on skin: Irritating to skin and mucous membranes

Irritant effect on eyes: Risk of serious damage to eyes.

Sensitization: There is no data available for this product.

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Component B (Curing agent)



Revision date : 31.07.2019

Version : 1.0 /en

Print date : 31.07.2019

Carcinogenic effects	No data available
Mutagenicity	There is no data available for this product.
Reproduction toxicity	There is no data available for this product.
Caustic effect	Causes severe skin burns and eye damage.

11.2 Additional information

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

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish [mg/l]

Hazardous ingredients

2-Methyl-1,5-pentandiamin			
Value	Test criterion	Test species	Source
1825	LC50	Fish (mg/l)	Company data

Phenol, styrenated				
Value	Test criterion	Measuring method	Exposure duration	Source
14,8	LL50:	OECD 203	96 h	Company data

Toxicity to daphnia [mg/l]

Hazardous ingredients

2-Methyl-1,5-pentandiamin				
Value	Test criterion	Test species	Exposure duration	Source
19.8	EC50	Daphnia magna (Big water flea)	48 h	Company data

Phenol, styrenated					
Value	Test criterion	Test species	Exposure duration	Measuring method	Source
< 10	EL50:	Daphnia magna (Big water flea)	48 h	OECD 202	Company data

Toxicity to algae [mg/l]

Hazardous ingredients

2-Methyl-1,5-pentandiamin				
Value	Test criterion	Test species	Exposure duration	Source
100	EC50	Algae (mg/l)	72 h	Company data

Phenol, styrenated				
Value	Test criterion	Exposure duration	Measuring method	Source

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Component B (Curing agent)



Revision date : 31.07.2019

Version : 1.0 /en

Print date : 31.07.2019

3,14	ErC50:	72 h	OECD 201	Company data
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NOEC (daphnia) [mg/l]

Hazardous ingredients

Phenol, styrenated					
Value	Test criterion	Test species	Duration of dosage	Measuring method	Source
0,115	NOEC	Daphnia magna (Big water flea)	21 d	OECD 211	Company data

12.2 Persistence and degradability

Elimination and distribution mechanisms There is no data available for this product.

Elimination in purification plant There is no data available for this product.

Biodegradability There is no data available for this product.

12.3 Bioaccumulative potential

Bioaccumulation There is no data available for this product.

Bioconcentration factor (BCF) There is no data available for this product.

12.4 Mobility in soil

Distribution in the environment There is no data available for this product.

Mobility There is no data available for this product.

12.5 Results of PBT and vPvB assessment

Results of PBT characteristics determination This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

12.6 Other adverse effects

Further information on ecology No information on ecology is available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal considerations Dispose of as hazardous waste in compliance with local and national regulations.

Waste Code Product
080409 - waste adhesives and sealants containing organic solvents or other dangerous substances
cured material

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Component B (Curing agent)



Revision date : 31.07.2019

Version : 1.0 /en

Print date : 31.07.2019

200000 - MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS

Uncleaned empty packaging

Dispose of as unused product.

Do not flush into surface water or sanitary sewer system.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG	Air transport ICAO/IATA
14.1 UN-No	3259	3259	3259
14.2 Description of the goods	AMINES, SOLID, CORROSIVE, N.O.S.	AMINES, SOLID, CORROSIVE, N.O.S.	Amines, solid, corrosive, n.o.s.
14.3 Transport hazard class(es)	8	8	8
14.4 Packaging group	I	I	I
Labels	8 	8 	8 
Risk No.	88		
Category	1		
Classification Code	C8		
Tunnel restriction code	E		
Danger releasing substance	2-Methyl-1, 5-pentanediamine	2-Methyl-1, 5-pentanediamine	2-Methyl-1, 5-pentanediamine
14.2 UN proper shipping name		AMINES, SOLID, CORROSIVE, N.O.S.	Amines, solid, corrosive, n.o.s.
EmS		F-A;S-B	
Stowage category		A	

14.6 Special precautions for user

Precautions not required under normal use

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL and the IBC Code not applicable

SECTION 15: Regulatory information

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

Restriction of occupation. Do not use for private purposes (household). Reserved for industrial and professional use.

Water Hazard Class (Ger.) 2

Classification in compliance with the Industrial Safety Regulation -

Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name : FIS EP 390/585 S Component B (Curing agent)



Revision date : 31.07.2019

Version : 1.0 /en

Print date : 31.07.2019

15.2 Chemical safety assessment

Safety assessment Not relevant. Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Relevant H-phrases H302: Harmful if swallowed.
H312: Harmful in contact with skin.
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H332: Harmful if inhaled.
H335: May cause respiratory irritation.
H411: Toxic to aquatic life with long lasting effects.
H412: Harmful to aquatic life with long lasting effects.

Wording of the hazard classes Acute Tox.: Acute toxicity
STOT SE: Specific target organ toxicity - single exposure
Eye Dam.: Serious eye damage
Skin Irrit.: Skin irritation
Skin Sens.: Skin sensitization
Aquatic Chronic: Hazardous to the aquatic environment

Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

Classification	Evaluation
Skin Corr. 1A; H314	Calculated
Skin Sens. 1; H317	Calculated
Aquatic Chronic 3; H412	Calculated

Recommended restrictions None under normal processing. Observe technical data sheet.

Modifications of the previous version are denoted with an asterisk (*).

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