

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

1.1 Product identifier

Commercial Product Name FIS P PLUS 380 C

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
1.4 Emergency telephone nur	a h a r

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 Reg- Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 ulation (EC) No. 1272/2008

2.2 Label elements

Hazard pictogram





Signal word	Danger
Hazardous component(s) to be indicated on label	Cement , portland , chemicals , tetramethylendimethacrylat , 2-hy- droxypropyl methacrylate , dibenzoyl peroxide
H-statement(s)	H315: Causes skin irritation. H317: May cause an allergic skin reaction.

	H318: Causes serious eye damage.
P-statement(s)	P101: If medical advice is needed, have product container or label at hand. P102: Keep out of reach of children.
	P280: Wear protective gloves/protective clothing/eye protection/face protection.
	P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310: Immediately call a POISON CENTER or doctor/physician.
2.3 Other hazards	
Health hazard	None known.
Particular information pertain- ing specific risk for human / en- vironment	None known.
Indication of danger	None known.
Hazard precautions	None known.

SECTION 3: Composition/information on ingredients

Hazardous ingredients

Ingredient		Classification (EC) 1272/2008	Concen- tration
Cement, portland, chemi- cals	CAS No. : 65997-15-1 EC-No. : 266-043-4 REACH No. : The sub- stance does not require registration according to Regulation (EC) No 1207/2006 [REACH].	Skin Irrit. 2;H315 Eye Dam. 1; H318 STOT SE 3;H335	10.0 – 25.0 % by weight
tetramethylendimethacrylat	CAS No. : 2082-81-7 EC-No. : 218-218-1 REACH No. : 01-2119967415-30	Skin Sens. 1; H317	10.0 – 25.0 % by weight
2-hydroxypropyl methacry- late	CAS No. : 27813-02-1 EC-No. : 248-666-3 REACH No. : 01-2119490226-37	Skin Sens. 1; H317 Eye Irrit. 2; H319	2.5 – 10.0 % by weight
dibenzoyl peroxide	CAS No. : 94-36-0 EC-No. : 202-327-6 Index-No. : 617-008-00-0 REACH No. : 01-2119511472-50	Org. Perox. B; H241 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Acute 1; H400	< 2.5 % by weight

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

If symptoms persist, call a physician. Remove/Take off immediately all contaminated clothing.

If inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.	
In case of skin contact	IF ON SKIN: Gently wash with plenty of soap and water.	
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.	
If swallowed	If swallowed, seek medical advice immediately and show this contain- er or label. Clean mouth with water and drink afterwards plenty of water. Drink 1 or 2 glasses of water. Do NOT induce vomiting.	
4.2 Most important symptoms and effects, both acute and delayed		

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	None known.
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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	Carbon dioxide (CO2) Dry powder Foam 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 Heating or fire can release toxic gas. from the substance or preparation itself, its combustion products, or released gases

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 dis- posed of in accordance with local regulations. Keep containers and surroundings cool with water spray.



6.1 Personal precautions, pro	ptective equipment and emergency procedures
Personal precautions	Ensure adequate ventilation, especially in confined areas. Keep people away from and upwind of spill/leak.
6.2 Environmental precautio	ns
Environmental precautions	The product should not be allowed to enter drains, water courses or the soil. Prevent spreading over a wide area (e.g. by containment or oil barri- ers).
6.3 Methods and material fo	r containment and cleaning up
Methods for cleaning up	Use mechanical handling equipment. Treat recovered material as described in the section "Disposal consid- erations".
6.4 Reference to other section	ns
Reference to other sections	See chapter 8/13
6.5 Additional information	
Other information	Dispose of in accordance with local regulations.
SECTION 7: Handling and	storage
7.1 Precautions for safe hand	dling
Advice on safe handling	None under normal processing. Caution: During machining in cured state dust is formed.
Advice on protection against fire and explosion	No special precautions required.
7.2 Conditions for safe stora	ge, including any incompatibilities
Storage space and container re- quirements	Keep containers tightly closed in a cool, well-ventilated place. Store in accordance with local regulations. Keep only in original container.
Hints on storage assembly	Store in accordance with the particular national regulations.
German storage class	10-13 (TRGS 510)
7.3 Specific end use(s)	
Specific use(s)	composite mortar Further information: see technical data sheet.

Replaces version from : 20.01.2015 Print date : 11.05.2017

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Cement, portland, chemicals

Great Britain

Long-term exposure value/ mg/m3	Remarks	Source
10	inhalable dust	100
4	respirable dust	100

Source : 100 - Company data

dibenzoyl peroxide

Great Britain

Long-term exposure value/ mg/m3	Remarks	Source
5	R2, 36, 43	100

Source : 100 - Company data

8.2 Exposure controls

Respiratory protection	No personal respiratory protective equipment normally required.
Hand protection	not required under normal use
Suitable material :	butyl-rubber, Chloroprene, Nitrile rubber
Unsuitable material :	PVC disposable gloves
Material thickness :	adjust to application and duration of use
Break through time :	adjust to application and duration of use
Remarks :	Take note of the information given by the producer concerning per- meability and break through times, and of special workplace condi- tions (mechanical strain, duration of contact).
Reference substance :	Replace when worn.
Eye protection	Tightly fitting safety goggles
Skin and body protection	Wear suitable protective equipment.
Note :	Choose body protection according to the amount and concentration of the dangerous substance at the work place.
General protective and hygiene measures	Smoking, eating and drinking should be prohibited in the application area. Avoid contact with skin, eyes and clothing. Take off all contaminated clothing immediately. Wash hands before breaks and at the end of workday. Keep away from food, drink and animal feedingstuffs. Use protective skin cream before handling the product.



Information on environmental No special environmental precautions required. protection regulations

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	paste
Colour	grey
Odour	characteristic
Odour threshold	not determined
рН	No data available
Melting point [°C] / Freezing point [°C]	No data available
Boiling point [°C]	no data available
Flash point [°C]	> 100
Evaporation rate [kg/(s*m²)]	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
Vapour density	No data available
Density [g/cm ³]	1,7 - 1,8
Temperature :	20 °C
Relative density	No data available
Solubility	No data available
Water solubility [g/l]	not determined
Solubility [g/l]	No data available
Partition coefficient n-octanol / water (log P O/W)	No data available
Autoinflammability	not auto-flammable
Decomposition temperature [°C]	not determined
Viscosity, dynamic [kg/(m*s)]	180 - 230
Temperature :	20 °C
Explosive properties	Not explosive



Risk of explosion.	Not explosive
Oxidising properties	No
9.2 Other information	
Relative vapour density (air=1)	not determined
SECTION 10: Stability and r	eactivity
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 decomposition if used as directed.
10.5 Incompatible materials	
Materials to avoid	Not applicable.
10.6 Hazardous decompositio	on products
Hazardous decomposition prod- ucts	No decomposition if used as directed.
SECTION 11. Toxicological	information

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Hazardous ingredients

Cement, portland, chemicals

Oral toxicity [mg/kg]	Test criterion	Remarks	Source
> 2000	LD50	literature value	100

Source : 100 - Company data

Dermal toxicity [mg/ kg]	Test criterion	Test species	Remarks	Source
> 2000	LD50	rabbit	Limit test 2000 mg/kg	100

Source : 100 - Company data

Inhalative toxicity [mg/l]	Test criterion	Test species	Note	Source
> 5	LC50	rat	Limit Test 5 g/m ³	100

Source : 100 - Company data

Specific target organ toxicit sure) [mg/kg]	y (single expo-	Specific effects	Source
Caustic effect	No data availab	le	
Reproduction toxicity	Not applicable.		
Mutagenicity	Not applicable.		
Carcinogenic effects	Not applicable.		
Sensitization	May cause an a	llergic skin reaction.	

	Irritating to respiratory system. (dust)

Source : 100 - Company data

Specific target organ toxicity (repeated expo- sure) [mg/kg]	Remarks	Source
	Not applicable.	100

100

Source : 100 - Company data

Tetramethylen dimethacrylate

> 2000 LD50 rat	100

Source : 100 - Company data

Dermal toxicity [mg/kg]	Test criterion	Test species	Source
> 3000	LD50	rabbit	100

Source : 100 - Company data

Inhalative toxicity [mg/l]	Source
No data available	100

Source : 100 - Company data

Specific target organ toxicity	(single expoSpecific effects
Caustic effect	Not applicable.
Reproduction toxicity	Not applicable.
Mutagenicity	Not applicable.
Carcinogenic effects	Contains no ingredient listed as a carcinogen
Sensitization	Skin sensitizer

Specific target organ toxicity (single expo- sure) [mg/kg]	Specific effects	Source
	none	100

Source : 100 - Company data

Specific target organ toxicity (repeated expo- sure) [mg/kg]	Specific effects	Source
	none	100

Source : 100 - Company data

Safety Data Sheet as per regulation (EC) 1907/2006 Commercial Product Name : FIS P PLUS 380 C Revision Date : 11.05.2017 Revision : 2.1 /en



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Oral toxicity [mg/kg]	Test criterion	Test species	5	Remarks	Source
> 2000	LD50	rat		OECD 401 Limit Test.	100
Source : 100 - Company data					
Dermal toxicity [mg/kg] Test criterio	n	Test sp	ecies	Source
> 5000	LD50		rabbit		100
Source : 100 - Company data					
Inhalative toxicity [mg,	/I]				Source
No data available					100
Source : 100 - Company data					
Sensitization	Skin sensitiz	er			
Carcinogenic effects	Not applicab	le.			
Mutagenicity	Not applicab	le.			
Remarks	OECD 471 (A	ames Test) / OE	CD 476.		
Reproduction toxicity	Not applicab	le.			
Remarks	OECD 422.				
Caustic effect	Not applicab	le.			
Specific target organ to sure) [mg/kg]	oxicity (single expo-	Remarks			Source

Source : 100 - Company data

Specific target organ toxicity (repeated expo- sure) [mg/kg]	Remarks	Source
	Not applicable.	100

Source : 100 - Company data

dibenzoyl peroxide

Oral toxicity [mg/kg]	Test criterion	Test species	Source
> 5000	LD50	rat	100
C 100 C		·	

Source : 100 - Company data

Inhalative toxicity [mg/l]	Test criterion	Test species	Note	Source
24300	LC50	rat	(dust)	100

Source : 100 - Company data

Irritant effect on skin

Irritating to skin and mucous membranes

Irritant effect on eyes

Irritating to eyes.

11.2 Additional information

Other information (chapter 11.) The product itself has not been tested.

SECTION 12: Ecological information

12.1 Toxicity

Hazardous ingredients

Cement, portland, chemicals

Toxicity to fish [mg/l]	Test criterion	Source
> 100	LC50	100

Source : 100 - Company data

Toxicity to daphnia [mg/l]	Test criterion	Test species	Source
> 100	LC50	Daphnia magna (Water flea)	100
			· · ·

Source : 100 - Company data

Toxicity to algae [mg/l]	Test criterion	Source
> 100	EC50	100

Source : 100 - Company data

Biodegradability

Not applicable. (inorganic)

Tetramethylen dimethacrylate

Toxicity to fish [mg/l]	Test criterion	Measuring method	Exposure duration	Source
32,5	LC50	DIN 38412	48 h	100

Source : 100 - Company data

Toxicity to algae [mg/	Test criterion	Test species	Measuring method	Source
1]				
9,79	EC50	Scenedesmus capricor- nutum (fresh water al- gae)		100

Source : 100 - Company data

NOEC (daphnia) [mg/l]	Test species	Measuring method	Source
7,51	Daphnia magna (Big water flea).	OECD 211	100

Source : 100 - Company data

Biodegradability

Readily biodegradable.

Ready degradability

2-hydroxypropyl methacrylate

Toxicity to fish [mg/l]	Test criterion	Test species	Measuring method	Exposure dura- tion	Source
493	LC50	Leuciscus idus (Golden orfe)	DIN 38412	48 h	100



Replaces version from : 20.01.2015 Print date : 11.05.2017

Source : 100 - Company data

Toxicity to daph- nia [mg/l]	Test criterion	Test species	Exposure dura- tion	Measuring method	Source
> 130	EC50	Daphnia magna (Water flea)	-	OECD Test Guide- line 202	100

Source : 100 - Company data

Toxicity to algae [mg/l]	Test criterion	Test species	Exposure dura- tion	Measuring method	Source
> 97,2	EC50	Selenastrum capri- cornutum	72 h	OECD Test Guide- line 201	100

Source : 100 - Company data

NOEC (daphnia) [mg/l]	Test criterion	Test species	Measuring method	Exposure dura- tion	Source
24,1	NOEC	Daphnia magna (Big water flea).	OECD 202	21 d	100

Source : 100 - Company data

Biodegradability

Readily biodegradable.

Ready degradability

dibenzoyl peroxide

Toxicity to fish [mg/l]	Test criterion	Exposure duration	Source
0,06	LC50	96 h	100

Source : 100 - Company data

Toxicity to daphnia [mg/l]	Test criterion	Test species	Exposure duration	Source
0,11	EC50	Daphnia magna (Water flea)	48 h	100

Source : 100 - Company data

0,06 EC50	72 h	100

Source : 100 - Company data

Ready degradability

12.2 Persistence and degradability

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

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

12.3 Bioaccumulative potential

Bioaccumulation There is no data available for this product.



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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	
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 very persis- tent nor very bioaccumulating (vPvB).
12.6 Other adverse effects	
Further information on ecology	The product itself has not been tested.
SECTION 13: Disposal cons	iderations
13.1 Waste treatment method	ls
Disposal considerations	The product should not be allowed to enter drains, water courses or the soil.
	Dispose of waste according to applicable legislation

Disposal considerations	The product should not be allowed to enter drains, water courses or the soil. Dispose of waste according to applicable legislation. Empty remaining contents.
Waste Code	 According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. The following Waste Codes are only suggestions: Product (Mortar and Curing agent) 200127 - paint, inks, adhesives and resins containing dangerous substances 080409 - waste adhesives and sealants containing organic solvents or other dangerous substances cured material and completely squeezed cartridges 200000 - MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG	Air transport ICAO/IATA
14.2 Description of the	No dangerous good ac-	No dangerous good ac-	No dangerous good ac-
goods	cording to ADR	cording to IMDG	cording to IATA
	No dangerous good ac-	No dangerous good ac-	No dangerous good ac-
	cording to ADR	cording to IMDG	cording to IATA
14.2 UN proper shipping		Non dangerous good	Non dangerous good
name		Non dangerous good	Non dangerous good
14.1 UN-No	Not applicable.	Not applicable.	Not applicable.
14.3 Transport hazard	Not applicable.	Not applicable.	Not applicable.
class(es)			
14.4 Packaging group	Not applicable.	Not applicable.	Not applicable.

	Land transport ADR/RID	Marine transport IMDG	Air transport ICAO/IATA
14.5 Environmental haz- ards	Not applicable.	Not applicable.	Not applicable.
Danger releasing sub- stance	Not applicable.	Not applicable.	Not applicable.

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	not applicable
Annex II of MARPOL and the IBC	
Code	

14.8 Additional information

Other information (chapter 14.) N

Not dangerous goods in the meaning of ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR

SECTION 15: Regulatory information

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

Decopaint regulation	Exempt
Carcinogenic hazardous sub- stance as per Annex II GefStoffV	no
Restriction of occupation.	Exempt
Water Hazard Class (Ger.)	1
Cassification in compliance with the Industrial Safety Regulation	Exempt

15.2 Chemical safety assessment

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

Additional regulations Not applicable.

SECTION 16: Other information

Relevant H-phrases	H241: Heating may cause a fire or explosion.
	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.
	H400: Very toxic to aquatic life.
Wording of the hazard classes	Skin Irrit.: Skin irritation

Replaces version from : 20.01.2015 Print date : 11.05.2017

Eye Dam.: Serious eye damage Skin Sens.: Skin sensitization STOT SE: Specific target organ toxicity – single exposure Eye Irrit.: Serious eye irritation Org. Perox.: Organic peroxide Aquatic Acute: Hazardous to the aquatic environment

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

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.