

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

# 1.1 Product identifier

Commercial Product Name FIS VT 380 C

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

Relevant identified uses	composite mortar
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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

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 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

\*Classification according to Di- R43 Xi; R41 rective 67/548/EEC / 1999/45/ EEC

## 2.2 Label elements

Hazard pictogram



Signal word

Danger



Safety Data Sheet as per regulation (EC) 1907/2006fische InnovationCommercial Product Name: FIS VT 380 C Revision Date: 20.01.2015Replaces version from: 24.0 Print date: 20.0Version: 5.0/enPrint date: 20.0	
Hazardous component(s) to be indicated on label	portland cement, tetramethylene dimethacrylate, 2-hydroxypropyl 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)	<ul> <li>P101: If medical advice is needed, have product container or label at hand.</li> <li>P102: Keep out of reach of children.</li> <li>P280: Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P310: Immediately call a POISON CENTER or doctor/physician.</li> </ul>
2.3 Other hazards	
*Health hazard	None known.
*Particular information pertain- ing specific risk for human / en- vironment	None known.

\*Hazard precautions None known.

# SECTION 3: Composition/information on ingredients

None known.

# Hazardous ingredients

\*Indication of danger

Ingredient		Classification (EEC) No 67/548 Classification (EC) 1272/2008	Concentration
portland cement	CAS No.: 65997-15-1 EC-No.: 266-043-4 REACH No.: The substance does not require registra- tion according to Regula- tion (EC) No 1207/2006 [REACH].	Xi; R37/38-41 Skin Irrit. 2;H315 Eye Dam. 1; H318 STOT SE 3;H335	10.0 – 25.0 % by weight
tetramethylene dimethacry- late	CAS No.: 2082-81-7 EC-No.: 218-218-1 REACH No.: 02-2119849716-25	Xi; R43 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	R43 Xi; R36 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	E; R3 Xi; R36 R43 N; R50/53 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

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	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	Heating or fire can cause the formation of methyl methacrylate va-
arising from the substance or	pors. Vapours are heavier than air.
preparation itself, its combus-	Heating or fire can release toxic gas.
tion products, or released gases	

## 5.3 Advice for firefighters

Special protective equipment for	In the event of fire, wear self-contained breathing apparatus.
firefighting	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.
SECTION 6: Accidental relea	ase measures
6.1 Personal precautions, pro	tective 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 precaution	S
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).
6.2 Mathada and matarial for	containment and cleaning up
Methods for cleaning up	Use mechanical handling equipment.
Methous for cleaning up	Treat recovered material as described in the section "Disposal consid- erations".
6.4 Reference to other section	15
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 s	<u>torage</u>
7.1 Precautions for safe hand	ling
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 storage	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.



# SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### portland cement

#### Great Britain

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

Source: 100 - 100

#### dibenzoyl peroxide

#### Great Britain

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

Source: 100 - 100

## 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
Risk of explosion.	Not explosive
Vapour pressure [kPa]	No data available
*Density [g/cm³]	1,7 - 1,8
Temperature:	20 °C
Relative density	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
Oxidising properties	No



9.2 Other information	
Relative vapour density (air=1)	not determined
SECTION 10: Stability and r	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 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**

## 11.1 Information on toxicological effects

## Hazardous ingredients

### portland cement

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

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

Source: 100 - 100

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

Source: 100 - 100

Sensitization

May cause an allergic skin reaction.

Not applicable.

Carcinogenic effects



Mutagenicity	Not applicable.			
Reproduction toxicity	Not applicable.			
Caustic effect	No data availab	ble		
Specific target organ toxic sure) [mg/kg]	ity (single expo-	Specific effects	5	Source
		Irritating to resp	oiratory system. (dust)	100
Specific target organ toxic sure) [mg/kg]	ity (repeated expo-	Remarks		Source
		Not applicable.		100
Source: 100 - 100 Tetramethylen dimethac	rylate			
Oral toxicity [mg/kg]	Test criterion		Test species	Source
> 2000	LD50		rat	100
Source: 100 - 100				

Source: 100 – 100

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

Source: 100 - 100

Inhalative toxicity [mg/l]	Source
No data available	2
Source: 2 SimCham	

Source: 2 - SimChem

Specific target organ toxicity	(single expo- Specific effects
Caustic effect	keine Corrosion
Reproduction toxicity	Not applicable.
Mutagenicity	Not applicable.
Carcinogenic effects	keine carcinogenic effects
Sensitization	Hautsensibilisierend.

Specific target organ toxicity (single expo- sure) [mg/kg]	Specific effects	Source
	keine	2

Source: 2 - SimChem

Specific target organ toxicity (repeated expo- sure) [mg/kg]	Specific effects	Source
	keine	2

Source: 2 - SimChem

### 2-hydroxypropyl methacrylate

Oral toxicity [mg/kg]	Test criterion	Test species	Remarks	Source
> 2000	LD50	rat	OECD 401 Limit Test.	100

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Source: 100 - 100

Dermal toxicity [mg/kg]	Test criterion	Test species	Source
> 5000	LD50	rabbit	100
Source: 100 - 100			

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

Source: 100 - 100

Sensitization	Hautsensibilisierend.
Carcinogenic effects	Not applicable.
Mutagenicity	Not applicable.
Reproduction toxicity	Not applicable.
Caustic effect	keine Corrosion

Specific target organ toxicity (single expo-<br/>sure) [mg/kg]RemarksSourceNot applicable.100

Source: 100 - 100

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

Source: 100 - 100

#### dibenzoyl peroxide

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

Source: 100 - 100

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

Source: 100 - 100

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**

#### portland cement

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

Source: 100 - 100

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

Source: 100 - 100

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

Source: 100 - 100

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 - 100

Toxicity to algae [mg/ ]	Test criterion	Test species	Measuring method	Source
9,79	EC50	Scenedesmus capricor- nutum (fresh water al- gae)	OECD Test Guideline 201	100

Source: 100 - 100

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

Source: 100 - 100

Biodegradability

Readily biodegradable.

### 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

Source: 100 - 100

Toxicity to daph- nia [mg/l]	Test criterion	Test species	Exposure dura- tion	Measuring method	Source
> 130	EC50	Daphnia magna (Water flea)	48 h	OECD Test Guide- line 202	100



Source: 100 - 100

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

Source: 100 - 100

NOEC (daphnia) [mg/l]	Duration of dosage	•	Measuring method	Test criterion	Source
24,1	21 d	Daphnia magna (Big water flea).	OECD 202	NOEC	100

Source: 100 - 100

Biodegradability Readily biodegradable.

#### dibenzoyl peroxide

Toxicity to fish [mg/l]	Test criterion	Exposure duration	Source
0,06	LC50	96 h	100
6			

Source: 100 - 100

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

Source: 100 - 100

Toxicity to algae [mg/l]	Test criterion	Exposure duration	Source
0,06	EC50	72 h	100
Source: 100 - 100		,	

Source: 100 - 100

### 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.
12.3 Bioaccumulative potenti	al
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	
Mobility:	There is no data available for this product.
1	



### 12.5 Results of PBT and vPvB assessment

Results of PBT characteristicsThis preparation contains no substance considered to be very persis-<br/>tent nor very bioaccumulating (vPvB).

### 12.6 Other adverse effects

Further information on ecology The product itself has not been tested.

## SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

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

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### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to not applicable Annex II of MARPOL73/78 and the IBC Code

## 14.8 Additional information

Other information (chapter 14.)	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 regu	lations/legislation specific for the substance or
mixture	

Restriction of occupation.

Additional regulations Not applicable.

### 15.2 Chemical safety assessment

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

## **SECTION 16: Other information**

Relevant R-phrases	R36: Irritating to eyes. R37/38: Irritating to respiratory system and skin. R41: Risk of serious damage to eyes. R43: May cause sensitisation by skin contact. R50/53: Very toxic to aquatic organisms, may cause long-term ad- verse effects in the aquatic environment.
Relevant H-phrases	<ul> <li>H241: Heating may cause a fire or explosion.</li> <li>H315: Causes skin irritation.</li> <li>H317: May cause an allergic skin reaction.</li> <li>H318: Causes serious eye damage.</li> <li>H319: Causes serious eye irritation.</li> <li>H335: May cause respiratory irritation.</li> <li>H400: Very toxic to aquatic life.</li> </ul>
Wording of the hazard classes	Skin Irrit.: Skin irritation Eye Dam.: Serious eye damage Skin Sens.: Skin sensitization STOT SE: Specific target organ toxicity – single exposure Eye Irrit.: Serious eye irritation Org. Perox.: Organic peroxide Aquatic Acute: Hazardous to the aquatic environment
*Modifications since last version	Modifications of the previous version are denoted with an asterisk (*).

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\*Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [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.

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.