

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

1.1 Product identifier

Commercial Product Name FIS VW 360 S - Mortar (Component A)

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	nber

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
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	2.5 – 10.0 % 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 % 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.



Replaces version from : 11.01.2017 Print date : 05.04.2017

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

None known. Symptoms

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas. Keep people away from and upwind of spill/leak.



Version : 4.2 /en

6.2 Environmental precaution	S		
Environmental precautions The prod the soil.		ould not be allowed to enter drains, water co	urses or
	Prevent spreadi ers).	ng over a wide area (e.g. by containment or o	oil barri-
6.3 Methods and material for	containment a	nd 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	ıs		
Reference to other sections	See chapter 8/13		
6.5 Additional information			
Other information	Dispose of in ac	cordance 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 ar	ıy 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 contr	ols/personal	protection	
8.1 Control parameters			
Cement, portland, chemica	als		
Great Britain			
Long-term exposure value/	mg/m3	Remarks	Source
10		inhalable dust respirable dust	100 100
Т			100



Replaces version from : 11.01.2017 Print date : 05.04.2017

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 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	light grey
Odour	characteristic
Odour threshold	not determined
рН	No data available
Melting point [°C] / Freezing point [°C]	No data available



Replaces version from : 11.01.2017 Print date : 05.04.2017

Deiling point [9C]		
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]	1,6 - 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 reactivity		

10.1 Reactivity	
Thermal decomposition	No decomposition if stored and applied as directed.
10.2 Chemical stability	

Revision Date : 28.03.2017 Version : 4.2 /en

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 decomposition products

Hazardous decomposition prod- No decomposition if used as directed. ucts

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	·		

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	1	1	5.5	1

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

Sensitization	May cause an allergic skin reaction.
---------------	--------------------------------------

Carcinogenic effects Not applicable.

Not applicable. Mutagenicity

Reproduction toxicity Not applicable.

No data available Caustic effect

Specific target organ toxicity (single expo- sure) [mg/kg]	Specific effects	Source
	Irritating to respiratory system. (dust)	100

Source : 100 - Company data

Source

100

Replaces version from : 11.01.2017 Print date : 05.04.2017

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

Source : 100 - Company data

Tetramethylen dimethacrylate

Oral toxicity [mg/kg]	Test criterion	Test species	Source
> 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			

Source : 100 - Company data

Inhalative toxicity [mg/l]		Source
No data available		100
Source : 100 - Company data		
Sensitization	Skin sensitizer	
Carcinogenic effects	Contains no ingredient listed as a carcinogen	
Mutagenicity	Not applicable.	
Reproduction toxicity	Not applicable.	
Caustic effect	Not applicable.	
Specific target organ toxic	ity (single expo- Specific effects	Source

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

2-hydroxypropyl methacrylate

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

Source : 100 - Company data

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

Source : 100 - Company data

Inha	lative	toxicity	[mg/l]	

No data available

Source : 100 - Company data

Sensitization Skin sensitizer Carcinogenic effects Not applicable. **Mutagenicity** Not applicable. OECD 471 (Ames Test) / OECD 476. Remarks Reproduction toxicity Not applicable. Remarks OECD 422. Caustic effect Not applicable.

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

Source : 100 - Company data

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

Source : 100 - Company data

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

Biodegradability Not applicable. (inorganic)

Tetramethylen dimethacrylate

NOEC (daphnia) [mg/l]	Test species	Measuring method	Source
7,51	Daphnia magna (Big water flea).	OECD 211	100
a 100 a 1.			

Source : 100 - Company data

Biodegradability Readily biodegradable.

Ready degradability





2-hydroxypropyl methacrylate

Test crite NOEC ^{hy data} ility g/l] d degrada ution ion plant e potentia	Readily There is There is bility There is There is	s no data availabl s no data availabl	Measuring method OECD 202 e for this product. e for this product. e for this product. e for this product.		Source 100
ility g/l] d degrada ution ion plant	There is There is There is bility There is There is	(Big water flea). y biodegradable. s no data available s no data available s no data available s no data available	e for this product. e for this product. e for this product. e for this product.		100
ility g/l]] I degrada ution ion plant	There is There is There is bility There is There is	y biodegradable. s no data available s no data available s no data available s no data available	e for this product. e for this product. e for this product.		
ility g/l]] I degrada ution ion plant	There is There is There is bility There is There is	s no data available s no data available s no data available s no data available	e for this product. e for this product. e for this product.		
ility g/l]] I degrada ution ion plant	There is There is There is bility There is There is	s no data available s no data available s no data available s no data available	e for this product. e for this product. e for this product.		
g/l]] I degrada ution ion plant	There is There is bility There is There is	s no data availabl s no data availabl s no data availabl	e for this product. e for this product. e for this product.		
] I degrada ution ion plant	There is There is bility There is There is	s no data availabl s no data availabl s no data availabl	e for this product. e for this product. e for this product.		
] I degrada ution ion plant	There is bility There is There is	s no data availabl s no data availabl	e for this product. e for this product.		
I degrada ution ion plant	bility There is There is	s no data availabl	e for this product.		
ution ion plant	There is				
ion plant	There is				
-		s no data availabl	e for this product.		
e potentia	al				
	There is	s no data availabl	e for this product.		
r (BCF)	There is	s no data availabl	e for this product.		
ronment	There is	s no data availabl	e for this product.		
	There is	s no data availabl	e for this product.		
and vPvB	assess	ment			
eristics	-	-		nsidered to be ver	y persis-
effects					
ecology	The pro	oduct itself has no	ot been tested.		
sal cons	iderati	ons			
it method	ls				
S	the soil Dispose	l. e of waste accordi	ing to applicable l		irses or
	effects ecology esal cons at method	tent no effects ecology The pro osal consideration of methods s The pro- the soil Dispose	tent nor very bioaccumul effects ecology The product itself has no osal considerations at methods s The product should not l the soil. Dispose of waste accordi	tent nor very bioaccumulating (vPvB). effects ecology The product itself has not been tested. esal considerations t methods s The product should not be allowed to enter the soil.	tent nor very bioaccumulating (vPvB). effects ecology The product itself has not been tested. osal considerations to methods s The product should not be allowed to enter drains, water cou the soil. Dispose of waste according to applicable legislation.

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
14.1 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

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.)

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-	no
stance as per Annex II GefStoffV	



Restriction of occupation.	Exempt		
Water Hazard Class (Ger.)	1		
Cassification in compliance with the Industrial Safety Regulation	Exempt		
15.2 Chemical safety assessm	nent		
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	ation		
Relevant H-phrases	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.		
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		
Classification for mixtures	Classification	Evaluation	
and used evaluation method	Skin Irrit. 2; H315	Calculated	

Classification for mixtures	Classification	Evaluation
and used evaluation method	Skin Irrit. 2; H315	Calculated
	Eye Dam. 1; H318	Calculated
according to regulation (EC)	Skin Sens. 1; H317	Calculated
1272/2008 [CLP]		·

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.



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

1.1 Product identifier

Commercial Product Name FIS VW 360 S - Hardener (Component B)

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 nun	abor

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- Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 2; H411 ulation (EC) No. 1272/2008

2.2 Label elements

Hazard pictogram





Signal word	Danger
Hazardous component(s) to be indicated on label	ethanediol , ethylene glycol , dibenzoyl peroxide
H-statement(s)	H317: May cause an allergic skin reaction. H319: Causes serious eye irritation.

	H411: Toxic to aquatic life with long lasting effects.
P-statement(s)	P101: If medical advice is needed, have product container or label at hand.
	P280: Wear protective gloves/protective clothing/eye protection/face protection.
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
ethanediol, ethylene glycol	CAS No. : 107-21-1 EC-No. : 203-473-3 Index-No. : 603-027-00-1 REACH No. : 01-2119456816-28	Acute Tox. 4; H302 STOT RE 2; H373	10.0 – 25.0 % 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	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. 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 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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective 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 precautions

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 for containment and cleaning up



	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 s	torage
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 contr	ols/nersonal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

ethanediol, ethylene glycol

Great Britain

Long-term expo- sure value/ ppm	Long-term expo- sure value/ mg/ m3	Short-term ex- posure value / ppm	Short-term ex- posure value / mg/m3	Remarks	Source
	10			particulate; Can be absorbed through the skin.	19
20	52	40	104	vapour; Can be absorbed through the skin.	19

Source : 19 - EH40/2005 Workplace exposure limits (2011)

Commercial Product Name Revision Date : 28.03.2017 Version : 5.2 /en

Europe

Long-term exposure val- ue/ mg/m3	- J		Short-term exposure val- ue / ppm	Note	Issuing date	Source
52	20	104	40	Skin	2000/39	24

Source : 24 - DIRECTIVE 2009/161/EU

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 protection regulations	No special environmental precautions required.



, Replaces version from : 11.01.2017 Print date : 05.04.2017

SECTION 9: Physical and chemical properties

9.1 Information on basic phys	sical and chemical properties
Form	paste
Colour	black
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
Density [g/cm³]	1,45 - 1,55
Temperature :	20 °C
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)]	80 - 140
Temperature :	20 °C
Risk of explosion.	Not explosive
9.2 Other information	
Oxidizing properties	Oxidising
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

ethanediol, ethylene glycol

Oral toxicity [mg/kg]	Source
Harmful if swallowed.	100
Source : 100 - Company data	

Dermal toxicity [mg/kg]	Test criterion	Test species	Source
> 3500	LD50	rabbit	100

Source : 100 - Company data

Inhalative toxicity [mg/l]	Test criterion	Test species	Note	Exposure dura- tion	Source
> 2,5	LC50	rat	(as aerosol)	6 h	100

Source : 100 - Company data

Sensitization	not sensitising.
Carcinogenic effects	Contains no ingredient listed as a carcinogen
Mutagenicity	Not applicable.
Reproduction toxicity	Not applicable.
Caustic effect	No data available

Safety Data Sheet as per regulation (EC) 1907/2006 Commercial Product Name : FIS VW 360 S - Hardener (Component B)

Commercial Product Name : Revision Date : 28.03.2017 Version : 5.2 /en

Specific target organ toxicity (repeated ex- posure) [mg/kg]	Route of exposure	Organs affected	Specific effects	Source
	Ingestion	Causes damage to kid- neys if swallowed.	Causes damage to or- gans through pro- longed or repeated ex- posure.	100
	Skin contact	May cause damage to kidneys in contact with skin.	Causes damage to or- gans through pro- longed or repeated ex- posure.	100

Source : 100 - Company data

dibenzoyl peroxide

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

Source : 100 - Company data

	nhalative toxicity mg/l]	Test criterion	Test species	Note	Source
2	4300	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

ethanediol, ethylene glycol

Toxicity to fish [mg/l]	Test criterion	Test species	Exposure duration	Source
72860	LC50	Pimephales promelas	96 h	100
		(Pimephales promelas		
		(fathead minnow))		

Source : 100 - Company data

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

Source : 100 - Company data

Safety Data Sheet as per regulation (EC) 1907/2006 Commercial Product Name : FIS VW 360 S - Hardener (Component B)

Commercial Product Name : Revision Date : 28.03.2017 Version : 5.2 /en

Toxicity to algae [mg/]	Test criterion	Test species	Exposure duration	Source
> 6500	EC50	Selenastrum capricor-	96 h	100
		nutum		

Source : 100 - Company data

NOEC (fish) [mg/l]	Test criterion	Test species	Exposure duration	Source
15380	NOEC	Pimephales promelas	7 d	100
		(fathead minnow)		

Source : 100 - Company data

Biodegradability 90 - 100 %

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

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

Source : 100 - Company data

Ready degradability

NOEC (daphnia) [mg/l]

Value	Test species	Measuring method	Exposure duration
1	Daphnia magna (Big water flea).	OECD 202	48 h

NOEC (algae) [mg/l]

Value	Test species	Measuring method	Exposure duration
0,5	Pseudokirchneriella sub-	OECD 201	72 h
	capitata		

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

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

Revision Date : 28.03.2017 Version : 5.2 /en

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 Results of PBT characteristics determination	assessment 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 should not be allowed to enter drains, water courses or the soil.
SECTION 13: Disposal consi	iderations
13.1 Waste treatment method	S
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
14.1 UN-No	3077	3077	3077
14.2 Description of the goods	ENVIRONMENTALLY HAZ- ARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)	ENVIRONMENTALLY HAZ- ARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)	ENVIRONMENTALLY HAZ- ARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)
14.2 UN proper shipping name		ENVIRONMENTALLY HAZ- ARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)	Environmentally haz- ardous substance, solid, n.o.s. (dibenzoyl peroxide)
14.3 Transport hazard class(es)	9	9	9



	Land transport ADR/RID	Marine transport IMDG	Air transport ICAO/IATA
14.4 Packaging group		111	111
14.5 Environmental haz-	U – Environmentally haz-	U – marine pollutant	U - Environmentally haz-
ards	ardous		ardous
			Not dangerous goods in
	original packaging (Special	original packaging (Special	original packaging (Special
	Provision 375)	Provision 969)	Provision A197)

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

SECTION 15: Regulatory information

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

Restriction of occupation.

Water Hazard Class (Ger.) 1

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. H302: Harmful if swallowed. H317: May cause an allergic skin reaction. H319: Causes serious eye irritation. H373: May cause damage to organs through prolonged or repeated exposure . H400: Very toxic to aquatic life. H411: Toxic to aquatic life with long lasting effects.
Wording of the hazard classes	Eye Irrit.: Serious eye irritation Skin Sens.: Skin sensitization Aquatic Chronic: Hazardous to the aquatic environment Acute Tox.: Acute toxicity STOT RE: Specific target organ toxicity – repeated exposure Org. Perox.: Organic peroxide Aquatic Acute: Hazardous to the aquatic environment

Safety Data Sheet as per regulation (EC) 1907/2006fischer controlCommercial Product Name :FIS VW 360 S - Hardener (Component B)Innovative solutionsRevision Date : 28.03.2017Replaces version from : 11.01.2017Version : 5.2 /enPrint date : 05.04.2017

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

Classification	Evaluation
Eye Irrit. 2; H319	Calculated
Skin Sens. 1; H317	Calculated
Aquatic Chronic 2; H411	Experimental data

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.