

Safety Data Sheet

according to Regulation (EC) No 1907/2006

VM-K, Comp. A

Revision date: 26.04.2018

Product code: SDB0032

Page 1 of 10

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

1.1. Product identifier

VM-K, Comp. A

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

Use of the substance/mixture

Adhesive mortar for fastening elements A-component (resin)

Uses advised against

no restriction

1.3. Details of the supplier of the safety data sheet

Company name:	MKT Metall-Kunststoff-Technik GmbH & Co. KG	
Street:	Auf dem Immel 2	
Place:	67685 Weilerbach	
Telephone:	+49(0)6374-91 16-0	Telefax: +49(0)6374-91 16-60
e-mail:	info@mkt.de	
Internet:	www.mkt.de	

1.4. Emergency telephone number:

+49 (0) 89-19240 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory or skin sensitisation: Skin Sens. 1B

Hazard Statements:

Causes serious eye irritation.

May cause an allergic skin reaction.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

tetramethylene dimethacrylate

1,4-naphthoquinone

Signal word: Warning

Pictograms:



Hazard statements

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

Precautionary statements

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.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

VM-K, Comp. A

Revision date: 26.04.2018

Product code: SDB0032

Page 2 of 10

P363

Wash contaminated clothing before reuse.

P501

Dispose of contents/container to in accordance with local/regional/national/international regulation.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
2082-81-7	tetramethylene dimethacrylate			20 - < 25 %
	218-218-1		01-2119967415-30	
	Skin Sens. 1B; H317			
25013-15-4	Vinyltoluene			5 - < 8 %
	246-562-2		01-2119622074-50	
	Flam. Liq. 3, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Asp. Tox. 1, Aquatic Chronic 3; H226 H332 H315 H319 H304 H412			
3077-12-1	N,N-Bis(2-hydroxyethyl)-p-toluidin			< 1.5 %
	221-359-1			
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1; H302 H315 H318			
130-15-4	1,4-naphthoquinone			< 0.1 %
	204-977-6		01-2120760462-57	
	Acute Tox. 2, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1C, Eye Irrit. 2, Skin Sens. 1A, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 1; H330 H311 H301 H314 H319 H317 H335 H400 H410			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off immediately all contaminated clothing and wash it before reuse.

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water.

4.2. Most important symptoms and effects, both acute and delayed

Allergic reactions

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Extinguishing powder
Water spray jet
Carbon dioxide (CO₂).

Unsuitable extinguishing media

Full water jet
Foam.

5.2. Special hazards arising from the substance or mixture

Pyrolysis products, toxic
Carbon monoxide

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes.
Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.
Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Use only outdoors or in a well-ventilated area.
When using do not eat, drink or smoke.
Wash hands before breaks and after work.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed.
Keep only in the original container in a cool, well-ventilated place.

Advice on storage compatibility

Do not use for products which come into contact with the food stuffs.

Further information on storage conditions

storage temperature : 5 - 25°C

VM-K, Comp. A

Revision date: 26.04.2018

Product code: SDB0032

Page 4 of 10

7.3. Specific end use(s)

Adhesive mortar for fastening elements A-component (resin)

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
2082-81-7	tetramethylene dimethacrylate			
Worker DNEL, long-term		inhalation	systemic	14,5 mg/m ³
Worker DNEL, long-term		dermal	systemic	4,2 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	4,3 mg/m ³
Consumer DNEL, long-term		dermal	systemic	2,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,5 mg/kg bw/day

PNEC values

CAS No	Substance	Value
2082-81-7	tetramethylene dimethacrylate	
Freshwater		0,087 mg/l
Marine water		0,0087 mg/l
Freshwater sediment		3,12 mg/kg
Marine sediment		0,312 mg/kg
Micro-organisms in sewage treatment plants (STP)		20 mg/l
Soil		0,573 mg/kg

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.
Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Wear eye protection/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Wearing time with occasional contact (splashes): 0,4mm NBR (Nitrile rubber) >480min (EN374)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

VM-K, Comp. A

Revision date: 26.04.2018

Product code: SDB0032

Page 5 of 10

Wearing time with permanent contact 0,7mm NBR (Nitrile rubber) >480min (EN374)

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Paste	
Colour:	light beige	
pH-Value:		not determined

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	not determined
Flash point:	not applicable

Flammability

Solid:	not determined
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined

Auto-ignition temperature

Solid:	not determined
Gas:	not applicable
Decomposition temperature:	not determined

Oxidizing properties

Not oxidising.

Vapour pressure:	not determined
Density (at 20 °C):	1,73 g/cm ³
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.

Solubility in other solvents

not determined

Partition coefficient:	not determined
Vapour density:	not determined
Evaporation rate:	not determined

9.2. Other information

Solid content:	not determined
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SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Safety Data Sheet

according to Regulation (EC) No 1907/2006

VM-K, Comp. A

Revision date: 26.04.2018

Product code: SDB0032

Page 6 of 10

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
2082-81-7	tetramethylene dimethacrylate				
	oral	LD50 >5000 mg/kg	Rat		
	dermal	LD50 >3000 mg/kg	Rabbit		
25013-15-4	Vinyltoluene				
	oral	LD50 2000-5000 mg/kg	Rat		
	dermal	LD50 2000-5000 mg/kg	Rabbit		
	inhalative vapour	LC50 17,8 mg/l	Rat		
	inhalative aerosol	ATE 1,5 mg/l			
3077-12-1	N,N-Bis(2-hydroxyethyl)-p-toluidin				
	oral	LD50 > 300 mg/kg	Rat		
130-15-4	1,4-naphthoquinone				
	oral	LD50 190 mg/kg	Rat		
	dermal	LD50 202 mg/kg	Rat		
	inhalative vapour	ATE 0,5 mg/l			
	inhalative aerosol	LC50 46 mg/l	Rat		

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

VM-K, Comp. A

Revision date: 26.04.2018

Product code: SDB0032

Page 7 of 10

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
2082-81-7	tetramethylene dimethacrylate					
	Acute fish toxicity	LC50 mg/l	32,5	96 h		
	Algae toxicity	NOEC	2,11 mg/l	3 d		
	Crustacea toxicity	NOEC mg/l	5,09	21 d		
	Acute bacteria toxicity	(32,5 mg/l)				
25013-15-4	Vinyltoluene					
	Acute fish toxicity	LC50	5,2 mg/l	96 h	Pimephales promelas (fathead minnow)	
	Acute algae toxicity	ErC50	2,6 mg/l	72 h		
	Acute crustacea toxicity	EC50	1,3 mg/l	48 h		
	Fish toxicity	NOEC	2,6 mg/l	4 d	Pimephales promelas (fathead minnow)	
	Algae toxicity	NOEC	1,6 mg/l	3 d		
	Crustacea toxicity	NOEC mg/l	0,81	2 d		
3077-12-1	N,N-Bis(2-hydroxyethyl)-p-toluidin					
	Acute fish toxicity	LC50	735 mg/l	96 h		
	Acute crustacea toxicity	EC50 mg/l	94,4	48 h		
130-15-4	1,4-naphthoquinone					
	Algae toxicity	NOEC mg/l	0,011			

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
2082-81-7	tetramethylene dimethacrylate			
	OECD 310	84%	28	

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
2082-81-7	tetramethylene dimethacrylate	3,1
25013-15-4	Vinyltoluene	3,58
3077-12-1	N,N-Bis(2-hydroxyethyl)-p-toluidin	1,09
130-15-4	1,4-naphthoquinone	1,8

BCF

CAS No	Chemical name	BCF	Species	Source
25013-15-4	Vinyltoluene	<500		

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

VM-K, Comp. A

Revision date: 26.04.2018

Product code: SDB0032

Page 8 of 10

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Waste disposal number of used product

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)**

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Revision date: 26.04.2018

VM-K, Comp. A

Product code: SDB0032

Page 9 of 10

Air transport (ICAO-TI/IATA-DGR)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No information available.

14.7. 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****EU regulatory information****Additional information**

VOC content: 2,8 % (DIN EN ISO 11890-2)

To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
Water contaminating class (D): 2 - clearly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 2,3,15,16.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
BCF: Bioconcentration factor
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
Acute Tox. 2: Acute toxicity, Category 2
Acute Tox. 3: Acute toxicity, Category 3
Acute Tox. 4: Acute toxicity, Category 4
Asp. Tox. 1: Aspiration hazard, Category 1
Aquatic Acute 1: Acute aquatic hazard, Category 1
Aquatic Chronic 1: Long-term aquatic hazard, Category 1
Aquatic Chronic 3: Long-term aquatic hazard, Category 3
Eye Dam. 1: Serious eye damage/eye irritation, Category 1

Safety Data Sheet

according to Regulation (EC) No 1907/2006

VM-K, Comp. A

Revision date: 26.04.2018

Product code: SDB0032

Page 10 of 10

Eye Irrit. 2: Serious eye damage/eye irritation, Category 2
 Flam. Liq. 3: Flammable liquid, Category 3
 Skin Corr. 1C: Skin corrosion/irritation, Category 1C
 Skin Irrit. 2: Serious eye damage/eye irritation, Category 2
 Skin Sens. 1A: Skin sensitization, Category 1A
 Skin Sens. 1B: Skin sensitization, Category 1B
 STOT SE 3: Specific target organ toxicity (single exposure), Category 3

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1B; H317	Calculation method

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic 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.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

VM-K, Comp. B

Revision date: 26.04.2018

Product code: SDB0020

Page 1 of 9

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

VM-K, Comp. B

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

compound mortar B-component (hardener)

Uses advised against

no restriction

1.3. Details of the supplier of the safety data sheet

Company name:	MKT Metall-Kunststoff-Technik GmbH & Co. KG	
Street:	Auf dem Immel 2	
Place:	67685 Weilerbach	
Telephone:	+49(0)6374-91 16-0	Telefax: +49(0)6374-91 16-60
e-mail:	info@mkt.de	
Internet:	www.mkt.de	

1.4. Emergency telephone number:

+49 (0) 89-19240 (24h)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory or skin sensitisation: Skin Sens. 1

Hazard Statements:

Causes serious eye irritation.

May cause an allergic skin reaction.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

dibenzoyl peroxide; benzoyl peroxide

Signal word: Warning**Pictograms:****Hazard statements**

H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P363	Wash contaminated clothing before reuse.
P501	Dispose of contents/container to in accordance with local/regional/national/international regulation.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

VM-K, Comp. B

Revision date: 26.04.2018

Product code: SDB0020

Page 2 of 9

2.3. Other hazards

This substance meets the PBT criteria of REACH, Annex XIII.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
94-36-0	dibenzoyl peroxide; benzoyl peroxide			10 - < 15 %
	202-327-6	617-008-00-0	01-2119511472-50	
	Org. Perox. B, Eye Irrit. 2, Skin Sens. 1, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 1; H241 H319 H317 H400 H410			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Change contaminated, saturated clothing.

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink plenty of water.

4.2. Most important symptoms and effects, both acute and delayed

Allergic reactions

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

Extinguishing powder

Water spray jet

Unsuitable extinguishing media

Full water jet

Foam.

5.2. Special hazards arising from the substance or mixture

Pyrolysis products, toxic

Carbon monoxide

VM-K, Comp. B

Revision date: 26.04.2018

Product code: SDB0020

Page 3 of 9

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes.
Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation.
Use personal protection equipment.
Special danger of slipping by leaking/spilling product.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Take up mechanically.
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Use only outdoors or in a well-ventilated area.
When using do not eat, drink or smoke.
Use protective skin cream before handling the product.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed.
Keep/Store only in original container.

Advice on storage compatibility

Do not use for products which come into contact with the food stuffs.
Store in a well-ventilated place. Keep cool.

Further information on storage conditions

Keep container tightly closed in a cool place.
storage temperature 5-25°C

7.3. Specific end use(s)

see section 1.2

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Safety Data Sheet

according to Regulation (EC) No 1907/2006

VM-K, Comp. B

Revision date: 26.04.2018

Product code: SDB0020

Page 4 of 9

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
94-36-0	Dibenzoyl peroxide	-	5		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
94-36-0	dibenzoyl peroxide; benzoyl peroxide			
Consumer DNEL, long-term		oral	systemic	2 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	13,3 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	39 mg/m ³

PNEC values

CAS No	Substance	Value
94-36-0	dibenzoyl peroxide; benzoyl peroxide	
Freshwater		0,00002 mg/l
Marine water		0,000002 mg/l
Freshwater sediment		0,013 mg/kg
Marine sediment		0,001 mg/kg

8.2. Exposure controls



Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Suitable eye protection: Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Wearing time with occasional contact (splashes): 0,4mm NBR (Nitrile rubber) >480min (EN374)

Wearing time with permanent contact 0,5mm NBR (Nitrile rubber) >480min (EN374)

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Paste	
Colour:	black	
Odour:	characteristic	
pH-Value:		not applicable

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	not determined
Flash point:	not applicable

Flammability

Solid:	not determined
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined

Auto-ignition temperature

Solid:	not determined
Gas:	not applicable
Decomposition temperature:	not determined

Oxidizing properties

Not oxidising.
Available oxygen content (%) < 1%
no classification

Vapour pressure:	not determined
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Density (at 20 °C):	1,59 g/cm ³
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Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.
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Solubility in other solvents

not determined	
Partition coefficient:	not determined
Vapour density:	not determined
Evaporation rate:	not determined

9.2. Other information

Solid content:	not determined
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SECTION 10: Stability and reactivity**10.1. Reactivity**

see section 10.3

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Violent reaction with: Oxidising agent

Safety Data Sheet

according to Regulation (EC) No 1907/2006

VM-K, Comp. B

Revision date: 26.04.2018

Product code: SDB0020

Page 6 of 9

10.4. Conditions to avoid

see section 7.2

10.5. Incompatible materials

Oxidising agent, strong

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
94-36-0	dibenzoyl peroxide; benzoyl peroxide				
	oral	LD50 >5000 mg/kg	Rat		

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

OECD 201 (Desmodesmus subspicatus)

IC10: (0 - 72 h) = 30 mg/l

IC50: (0 - 72 h) = 150 mg/l

OECD 202 (Daphnia magna)

EC0/NOEC (48h) = 100 mg/l

EC50 (48h) = >500 mg/l

EC100 (48h) = >>500 mg/l

OECD 203 (Danio rerio)

LC0/NOEC : 250 mg/l

LC50 : > 500 mg/l

LC100 : >> 500 mg/l

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
94-36-0	dibenzoyl peroxide; benzoyl peroxide					
	Acute fish toxicity	LC50 mg/l 0,0602	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203	
	Acute algae toxicity	ErC50 mg/l 0,0711	72 h	Pseudokirchneriella subcapitata	OECD 201	
	Acute crustacea toxicity	EC50 0,11 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202	
	Algae toxicity	NOEC mg/l 0,02	3 d	Pseudokirchneriella subcapitata	OECD 201	
	Crustacea toxicity	NOEC mg/l 0,001	21 d	Daphnia magna (Big water flea)	OECD 211	
	Acute bacteria toxicity	(35 mg/l)	0,5 h		OECD 209	

Safety Data Sheet

according to Regulation (EC) No 1907/2006

VM-K, Comp. B

Revision date: 26.04.2018

Product code: SDB0020

Page 7 of 9

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name	Method	Value	d	Source
		Evaluation			
94-36-0	dibenzoyl peroxide; benzoyl peroxide				
	OECD 301D	71%	28		
	Readily biodegradable (according to OECD criteria).				

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
94-36-0	dibenzoyl peroxide; benzoyl peroxide	3,2

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Waste disposal number of used product

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)**

- 14.1. UN number:** No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No information available.

14.7. 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****EU regulatory information****Additional information**

VOC content: 4,3 % (DIN EN ISO 11890-2)

To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC

National regulatory information**Employment restrictions:**

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D):

2 - clearly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Revision date: 26.04.2018

VM-K, Comp. B

Product code: SDB0020

Page 9 of 9

SECTION 16: Other information**Abbreviations and acronyms**

ADN: Accord européen relatif au transport international des marchandises Dangereuses par voie de Navigation
(European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR: Accord européen sur le transport des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS: Chemical Abstracts Service
CLP: Classification, Labeling and Packaging
DMEL: Derived Minimal Effect level
DNEL: Derived No Effect Level
EC50: Effective concentration, 50%
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations (DRG) for the air transport (IATA)
ICAO: International Civil Aviation Organization
IC50: Inhibitory concentration, 50%
IMDG: International Maritime Code for Dangerous Goods
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
NOEC: No Observed Effect Concentration
OECD: Organisation for Economic Co-operation and Development
PBT: persistent, bioaccumulative and toxic
vPvB: very persistent and very bioaccumulative
PNEC: Predicted No Effect Concentration
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses (Regulations Concerning the International Carriage of Dangerous Goods by Rail)
VOC: Volatile organic compound
Aquatic Chronic 3: Long-term aquatic hazard, Category 3
Acute Tox. 2: Acute toxicity, Category 2
Skin Irrit. 2: Serious eye damage/eye irritation, Category 2
Skin Sens. 1: Skin sensitization, Category 1
STOT SE 3: Specific target organ toxicity (single exposure), Category 3

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method

Relevant H and EUH statements (number and full text)

H241 Heating may cause a fire or explosion.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)