Safety Data Sheet

according to Regulation (EC) No 1907/2006

MIT-SP, MIT-SPE Plus, Comp. A

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

1.1. Product identifier

MIT-SP, MIT-SPE Plus, 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:	Mungo Befestigungstechnik AG	
Street:	Bornfeldstraße 2	
Place:	CH-4600 Olten	
Telephone:	+41 62 2067575	Telefax: +41 62 2067585
e-mail:	mungo@mungo.swiss	
Internet:	www.mungo.swiss	

1.4. Emergency telephone number:

Schweiz: 145
Int.: +41 44 251 51 51 (Schweizerisches Toxikologisches Informationszentrum - 24 h)

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:
May cause an allergic skin reaction.
Causes serious eye irritation.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

tetramethylene dimethacrylate
ethylene dimethacrylate
Methacrylic acid, monoester with propane-1,2-diol
1,4-naphthoquinone

Signal word: Warning

Pictograms:

Hazard statements

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

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.
P272	Contaminated work clothing should not be allowed out of the workplace.

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
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			15 - < 20 %
	218-218-1		01-2119967415-30	
	Skin Sens. 1B; H317			
25013-15-4	Vinyltoluene			5 - < 10 %
	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			
97-90-5	ethylene dimethacrylate			1 - < 5 %
	202-617-2	607-114-00-5		
	STOT SE 3, Skin Sens. 1; H335 H317			
27813-02-1	Methacrylic acid, monoester with propane-1,2-diol			1 - < 5 %
	248-666-3		01-2119490226-37	
	Eye Irrit. 2, Skin Sens. 1; H319 H317			
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			
38668-48-3	1,1´-(p-Tolylimino)dipropan-2-ol			< 1 %
	254-075-1			
	Acute Tox. 2, Eye Irrit. 2, Aquatic Chronic 3; H300 H319 H412			
130-15-4	1,4-naphthoquinone			< 0.1 %
	204-977-6			
	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 (CO_2).

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

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			
DNEL type		Exposure route	Effect	Value
2082-81-7	tetramethylene dimethacrylate			
Worker DNEL, long-term		inhalation	systemic	14,5 mg/m³
Worker DNEL, long-term		dermal	systemic	4,2 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	4,3 mg/m³
Consumer DNEL, long-term		dermal	systemic	2,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,5 mg/kg bw/day
27813-02-1	Methacrylic acid, monoester with propane-1,2-diol			
Worker DNEL, long-term		inhalation	systemic	14,7 mg/m³
Worker DNEL, long-term		dermal	systemic	4,2 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	8,8 mg/m³
Consumer DNEL, long-term		dermal	systemic	2,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,5 mg/kg bw/day
38668-48-3	1,1´-(p-Tolylimino)dipropan-2-ol			
Worker DNEL, long-term		inhalation	systemic	2 mg/m³
Worker DNEL, long-term		dermal	systemic	0,6 mg/kg bw/day

PNEC values

CAS No	Substance
Environmental compartment	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
27813-02-1	Methacrylic acid, monoester with propane-1,2-diol
Freshwater	0,904 mg/l
Marine water	0,904 mg/l
Freshwater sediment	6,28 mg/kg
Marine sediment	6,28 mg/kg
Micro-organisms in sewage treatment plants (STP)	10 mg/l
Soil	0,727 mg/kg
38668-48-3	1,1´-(p-Tolylimino)dipropan-2-ol
Freshwater	0,017 mg/l
Marine water	0,0017 mg/l
Freshwater sediment	0,0782 mg/kg
Marine sediment	0,00782 mg/kg
Micro-organisms in sewage treatment plants (STP)	199,5 mg/l
Soil	0,005 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

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:	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 oxidizing.

Vapour pressure:	not determined
Density (at 20 °C):	1,72 g/cm³
Water solubility:	insoluble

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

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

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			
27813-02-1	Methacrylic acid, monoester with propane-1,2-diol				
	oral	LD50 11200 mg/kg	Rat		
	dermal	LD50 > 5000 mg/kg	Rabbit		
3077-12-1	N,N-Bis(2-hydroxyethyl)-p-toluidin				
	oral	LD50 > 300 mg/kg	Rat		
38668-48-3	1,1´-(p-Tolylimino)dipropan-2-ol				
	oral	LD50 27,5 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg			
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

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

Further information

The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
2082-81-7	tetramethylene dimethacrylate						
	Acute fish toxicity	LC50	32,5 mg/l	96 h			
	Algea toxicity	NOEC	2,11 mg/l	3 d			
	Crustacea toxicity	NOEC	5,09 mg/l	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)		
	Algea toxicity	NOEC	1,6 mg/l	3 d			
	Crustacea toxicity	NOEC	0,81 mg/l	2 d			
27813-02-1	Methacrylic acid, monoester with propane-1,2-diol						
	Acute fish toxicity	LC50	379 mg/l	96 h			
	Acute algae toxicity	ErC50	>97,2 mg/l	72 h			
	Acute crustacea toxicity	EC50	>143 mg/l	48 h			
	Algea toxicity	NOEC	>97,2 mg/l				
	Crustacea toxicity	NOEC	45,2 mg/l	21 d			
3077-12-1	N,N-Bis(2-hydroxyethyl)-p-toluidin						
	Acute fish toxicity	LC50	735 mg/l	96 h			
	Acute crustacea toxicity	EC50	94,4 mg/l	48 h			
130-15-4	1,4-naphthoquinone						
	Algea toxicity	NOEC	0,011 mg/l				

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	
27813-02-1	Methacrylic acid, monoester with propane-1,2-diol			
	OECD 310	81%	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
38668-48-3	1,1´-(p-Tolylimino)dipropan-2-ol	2,1
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

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

2004/42/EC (VOC): 48,16 g/l

Additional information

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): 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)
ATE: Acute Toxicity Estimates
CAS: Chemical Abstracts Service
CLP: Classification, Labeling and Packaging
DMEL: Derived Minimal Effect level
DNEL: Derived No Effect Level
EC50: Effective concentration, 50%
ErC50: EC50 in terms of reduction of growth rate
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
IATA: International Air Transport Association
IMDG: International Maritime Code for Dangerous Goods
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
NOEC: No Observed Effect Concentration
OECD: Oragnisation 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

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H300	Fatal if swallowed.
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.)

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

1.1. Product identifier

MIT-SP, MIT-SPE Plus, 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:	Mungo Befestigungstechnik AG	
Street:	Bornfeldstraße 2	
Place:	CH-4600 Olten	
Telephone:	+41 62 2067575	Telefax: +41 62 2067585
e-mail:	mungo@mungo.swiss	
Internet:	www.mungo.swiss	

1.4. Emergency telephone number:

Schweiz: 145
Int.: +41 44 251 51 51 (Schweizerisches Toxikologisches Informationszentrum - 24 h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
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.

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, 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.

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

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
94-36-0	Dibenzoyl peroxide	-	5		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance		
DNEL type	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/m³

PNEC values

CAS No	Substance
Environmental compartment	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 oxidizing.
Available oxygen content (%) < 1%
no classification

Vapour pressure:	not determined
Density (at 20 °C):	1,59 g/cm³
Water solubility:	insoluble

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

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

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

This 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 0,0602 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203	
	Acute algae toxicity	ErC50 0,0711 mg/l	72 h	Pseudokirchneriella subcapitata	OECD 201	
	Acute crustacea toxicity	EC50 0,11 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202	
	Algea toxicity	NOEC 0,02 mg/l	3 d	Pseudokirchneriella subcapitata	OECD 201	
	Crustacea toxicity	NOEC 0,001 mg/l	21 d	Daphnia magna (Big water flea)	OECD 211	
	Acute bacteria toxicity	(35 mg/l)	0,5 h		OECD 209	

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

2004/42/EC (VOC): 68,37 g/l

Additional information

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.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 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)
CAS: Chemical Abstracts Service
CLP: Classification, Labeling and Packaging
DMEL: Derived Minimal Effect level
DNEL: Derived No Effect Level
EC50: Effective concentration, 50%
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
IATA: International Air Transport Association
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: Oragnisation 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

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.)