

Safety Data Sheet according to (EC) No 1907/2006

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Pattex Powerkleber Stabilit Express

SDS No. : 43189 V004.2 Revision: 16.05.2016 printing date: 09.03.2017 Replaces version from: 10.02.2016

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

1.1. Product identifier

Pattex Powerkleber Stabilit Express, Harz

Contains:

Methyl methacrylate

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

Intended use:

2-Component methyl methacrylate adhesive

1.3. Details of the supplier of the safety data sheet

Henkel AG & Co. KGaA Henkelstr. 67 40589 Düsseldorf

Germany

Phone: +49 (211) 797 0 Fax-no.: +49 (211) 798 4008

ua-productsafety.de@henkel.com

1.4. Emergency telephone number

The Henkel information service also provides an around-the-clock telephone service on phone no.+49-(0)211-797-3350 for exceptional cases.

Further information is available at Poison Control Centers.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):	
Flammable liquids	Category 2
H225 Highly flammable liquid and vapor.	
Skin irritation	Category 2
H315 Causes skin irritation.	
Serious eye irritation	Category 2
H319 Causes serious eye irritation.	
Skin sensitizer	Category 1
H317 May cause an allergic skin reaction.	
Specific target organ toxicity - single exposure	Category 3
H335 May cause respiratory irritation.	

2.2. Label elements

Label elements (CLP):

Hazard pictogram:	
Signal word:	Danger
Hazard statement:	 H225 Highly flammable liquid and vapor. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
Precautionary statement:	 P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing vapours. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/eye protection. P501 Dispose of contents/container in accordance with national regulation.

2.3. Other hazards

Persons suffering from allergic reactions to acrylates should avoid contact with the product. Pregnant women should absolutely avoid inhalation and skin contact. Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description: 2-Component methyl methacrylate adhesive Base substances of preparation: Polyester Polyether Methylmethacrylate

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Methyl methacrylate 80-62-6	201-297-1 01-2119452498-28	20- 40 %	Flam. Liq. 2 H225 STOT SE 3 H335 Skin Irrit. 2 H315 Skin Sens. 1 H317
Vinyltoluene 25013-15-4	246-562-2	10- 20 %	Flam. Liq. 3 H226 Skin Irrit. 2 H315 Eye Irrit. 2 H319 Acute Tox. 4; Inhalation H332 STOT SE 3 H335 Asp. Tox. 1 H304 Aquatic Chronic 2 H411
1,1'-(p-Tolylimino)dipropan-2-ol 38668-48-3	254-075-1	0,1-< 1 %	Acute Tox. 3; Oral H301 Eye Irrit. 2 H319 Aquatic Chronic 3 H412

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

In case of adverse health effects seek medical advice.

Inhalation:

Move to fresh air, consult doctor if complaint persists.

Skin contact:

Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing. If necessary, see a dermatologist.

Eye contact:

Immediately flush eyes with soft jet of water or eye rinse solution for at least 5 minutes. If pains remains (intensive smarting, sensivity to light, visual disturbance) continue flushing and contact/seek doctor or hospital.

Ingestion:

Rinse mouth and throat. Drink 1-2 glasses of water. Seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed SKIN: Redness, inflammation.

SIGHT. Reducess, inflammati

SKIN: Rash, Urticaria.

EYE: Irritation, conjunctivitis.

RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

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

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

carbon dioxide, foam, powder, water spray jet, fine water spray

Extinguishing media which must not be used for safety reasons: High pressure waterjet

righ pressure waterjet

5.2. Special hazards arising from the substance or mixture

Can form explosive gas/air mixtures.

5.3. Advice for firefighters

Wear protective equipment. Wear self-contained breathing apparatus.

Additional information:

Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Ensure adequate ventilation. Wear protective equipment. Danger of slipping on spilled product.

6.2. Environmental precautions

Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up

Remove with liquid-absorbing material (sand, peat, sawdust). Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure that workrooms are adequately ventilated. Take measures to prevent the build-up of electrostatic charges. Avoid naked flames, sparking and sources of ignition.

Hygiene measures:

Do not eat, drink or smoke while working. Wash hands before work breaks and after finishing work.

7.2. Conditions for safe storage, including any incompatibilities

Keep only in original container. Keep container in a well ventilated place. Store protected from heat influence. Temperatures between 0 °C and + 30 °C

Store in a cool place, max. storage temperature 30°C.

Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

7.3. Specific end use(s)

2-Component methyl methacrylate adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Germany

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Methyl methacrylate 80-62-6	50	210	Exposure limit(s):	2 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Methyl methacrylate 80-62-6			Short Term Exposure Classification:	Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900
Vinyltoluene 25013-15-4	100	490	Exposure limit(s):	2	TRGS 900
Vinyltoluene 25013-15-4			Short Term Exposure Classification:	Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900
Silicic acid 1343-98-2 [ALLGEMEINER STAUBGRENZWERT]			Explanations and basis for exposure limits in the workplace air - Number:		TRGS 901

Biological Exposure Indices:

None

8.2. Exposure controls:

Respiratory protection:

Suitable breathing mask when there is inadequate ventilation. Combination filter: ABEKP (EN 14387)

This recommendation should be matched to local conditions.

Hand protection:

Recommended are gloves made from Nitril rubber (Material thickness >0,1 mm, Perforation time < 30s). Gloves should be replaced after each short time contact or contamination. Available at laboratory specialized trade or at pharmacies / chemist's shops.

In the case of longer contact protective gloves made from nitrile rubber are recommended according to EN 374. Perforation time > 10 minutes

material thickness > 0.4 mm

In the case of longer and repeated contact please note that in practice the penetration times may be considerably shorter than those determined according to EN 374. The protective gloves must always be checked for their suitability for use at the specific workplace (e.g. mechanical and thermal stress, product compatibility, antistatic effects, etc.). The gloves must be replaced immediately at the first signs of wear and tear. The information provided by the manufacturers and given in the relevant trade association regulations for industrial safety must always be observed. We recommend that a hand care plan is drawn up in cooperation with a glove manufacturer and the trade association in accordance with the local operating conditions.

Eye protection: Goggles which can be tightly sealed. Protective eye equipment should conform to EN166.

Skin protection: Suitable protective clothing Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid
	viscous
	brown
Odor	characteristic
Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point	No data available / Not applicable
Flash point	$10 \ ^{\circ}C \ (50 \ ^{\circ}F);$ no method
Decomposition temperature	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Density	0,96 - 1,00 g/cm3
(20 °C (68 °F))	
Bulk density	No data available / Not applicable
Viscosity	15.000 - 25.000 mPa.s
(Brookfield; 20 °C (68 °F))	
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative)	Partially soluble
(23 °C (73.4 °F); Solvent: Water)	
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	
lower	1,1 %(V)
upper	12,5 %(V)
	The product is not explosive. The form
	mixtures is possible.
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable

Vapor density Oxidising properties

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity Reducing agents. Strong oxidizing agents.

10.2. Chemical stability Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions See section reactivity

10.4. Conditions to avoid

None if used for intended purpose.

rmation of explosive vapor/air No data available / Not applicable No data available / Not applicable

10.5. Incompatible materials

See section reactivity

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following. Persons suffering from allergic reactions to acrylates should avoid contact with the product.

Inhalative toxicity:

May cause respiratory irritation.

Skin irritation:

Causes skin irritation.

Eye irritation:

Causes serious eye irritation.

Sensitizing:

May cause an allergic skin reaction.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
1,1'-(p- Tolylimino)dipropan-2-ol 38668-48-3	LD50	100 mg/kg	oral		rat	

Acute inhalative toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
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Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
1,1'-(p-	not irritating		rabbit	
Tolylimino)dipropan-2-ol	-			
38668-48-3				

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
1,1'-(p-	irritating		rabbit	
Tolylimino)dipropan-2-ol				
38668-48-3				

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Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Methyl methacrylate 80-62-6	sensitising	Mouse local lymphnod e assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
1,1'-(p- Tolylimino)dipropan-2-ol 38668-48-3	not sensitising	Guinea pig maximisat ion test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Methyl methacrylate 80-62-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Methyl methacrylate 80-62-6	LOAEL=2000 ppm	inhalation	14 weeks6 hrs/day, 5 days/wk	mouse	Dose Range Finding Study
Methyl methacrylate 80-62-6	NOAEL=1000 ppm	inhalation	14 weeks6 hrs/day, 5 days/wk	mouse	Dose Range Finding Study

SECTION 12: Ecological information

General ecological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following. Do not empty into drains, soil or bodies of water.

Ecotoxicity

Acute fish toxicity:	$LC50 > 10 - \le 100 \text{ mg product/l.}$
Acute invertebrate toxicity:	$EC50 > 10 - \le 100 \text{ mg product/l}.$

Aquatic plant/algae toxicity: EC50 > 10 - <= 100 mg product/l.

12.1. Toxicity

Hazardous components	Value	Value	Acute	Exposure	Species	Method
CAS-No.	type		Toxicity Study	time		
Methyl methacrylate	LC50	350 mg/l	Fish		Leuciscus idus	OECD Guideline
80-62-6						203 (Fish, Acute
	ļļļ					Toxicity Test)
Methyl methacrylate	EC50	69 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
80-62-6						202 (Daphnia sp.
						Acute
						Immobilisation Test)
Methyl methacrylate	EC50	170 mg/l	Algae	4 d	Selenastrum capricornutum	OECD Guideline
80-62-6	LC30	170 mg/1	Algae	4 u	(new name: Pseudokirchnerella	
00 02 0					subcapitata)	Inhibition Test)
	NOEC	100 mg/l	Algae	4 d	Selenastrum capricornutum	OECD Guideline
		8	8		(new name: Pseudokirchnerella	201 (Alga, Growth
					subcapitata)	Inhibition Test)
Methyl methacrylate 80-62-6	EC0	100 mg/l	Bacteria	30 min	1 /	,
Vinyltoluene	LC50	5,2 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline
25013-15-4		-				203 (Fish, Acute
	l l					Toxicity Test)
Vinyltoluene	EC50	1,3 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
25013-15-4						202 (Daphnia sp.
						Acute
						Immobilisation
Vincelt-lease	EC50	26	A.1	72 h	S-1	Test) OECD Guideline
Vinyltoluene 25013-15-4	EC30	2,6 mg/l	Algae	/2 n	Selenastrum capricornutum (new name: Pseudokirchnerella	201 (Alga, Growth
23013-13-4					subcapitata)	Inhibition Test)
	NOEC	1,6 mg/l	Algae	72 h	Selenastrum capricornutum	OECD Guideline
	NOLC	1,0 mg/1	Aigae	/ 2 11	(new name: Pseudokirchnerella	
					subcapitata)	Inhibition Test)
1,1'-(p-Tolylimino)dipropan-	LC50	17 mg/l	Fish	96 h	Brachydanio rerio (new name:	OECD Guideline
2-ol					Danio rerio)	203 (Fish, Acute
38668-48-3					,	Toxicity Test)
1,1'-(p-Tolylimino)dipropan-	EC50	28,8 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
2-ol		-	-			202 (Daphnia sp.
38668-48-3						Acute
						Immobilisation
			I		l	Test)

12.2. Persistence and degradability

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Methyl methacrylate 80-62-6	readily biodegradable	aerobic	95 %	EU Method C.4-B (Determination of the "Ready" BiodegradabilityModified OECD Screening Test)
1,1'-(p-Tolylimino)dipropan- 2-ol 38668-48-3			< 20 %	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
		aerobic	< 1 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Hazardous components	LogKow	Bioconcentration	Exposure	Species	Temperature	Method
CAS-No.		factor (BCF)	time			

Methyl methacrylate 80-62-6	1,38					
Vinyltoluene 25013-15-4 Vinyltoluene 25013-15-4	3,35	96 - 180	30 d	Lepomis macrochirus	25 °C	
1,1'-(p-Tolylimino)dipropan- 2-ol 38668-48-3	1,47					OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Methyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
80-62-6	Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

Dispose of waste and residues in accordance with local authority requirements.

Disposal of uncleaned packages:

Use packages for recycling only when totally empty.

Waste code

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

SECTION 14: Transport information

14.1.	UN number	
	ADR	1133
	RID	1133
	ADN	1133
	IMDG	1133
	IATA	1133
14.2.	UN proper shij	pping name
	ADR	ADHESIVES
	RID	ADHESIVES
	ADN	ADHESIVES
	IMDG	ADHESIVES
	IATA	Adhesives
14.3.	Transport haz	ard class(es)
	ADR	3
	RID	3
	ADN	3
	IMDG	3
	IATA	3
14.4.	Packing group	
	ADR	III
	RID	III
	ADN	III
	IMDG	III
	IATA	III
14.5.	Environmental	l hazards
	ADR	not applicable
	RID	not applicable
	ADN	not applicable
	IMDG	not applicable
	IATA	not applicable
14.6.	Special precau	tions for user
	ADR	not applicable
		Tunnelcode: (E)
	RID	not applicable
	ADN	not applicable
	IMDG	not applicable
	IATA	not applicable
14.7.	Transport in b	ulk 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 VOC content 71,00 %

VOC content (VOCV 814.018 VOC regulation CH)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

National regulations/information (Germany):

WGK:

1, slightly water-endangering product. (German VwVwS of May 17, 1999) Classification in conformity with the calculation method

BG regulations, rules, infos:

BG regulation: BGV B 1 Handling hazardous substances

Storage class according to TRGS 510:

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text

of all abbreviations indicated by codes in this safety data sheet are as follows:

3

- H225 Highly flammable liquid and vapor.
- H226 Flammable liquid and vapor.
- H301 Toxic if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Label elements (DPD):

F - Highly flammable

Xi - Irritant





Risk phrases:

- R11 Highly flammable.
- R37/38 Irritating to respiratory system and skin.
- R43 May cause sensitisation by skin contact.

Safety phrases:

- S2 Keep out of the reach of children.
- S9 Keep container in a well-ventilated place.
- S16 Keep away from sources of ignition No smoking.
- S24 Avoid contact with skin.
- S37 Wear suitable gloves.
- S46 If swallowed, seek medical advice immediately and show this container or label.
- S51 Use only in well-ventilated areas.

Contains:

Methyl methacrylate

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.



Safety Data Sheet according to (EC) No 1907/2006

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Pattex Powerkleber Stabilit Express

SDS No. : 43188 V004.2 Revision: 16.05.2016 printing date: 09.03.2017 Replaces version from: 30.07.2014

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

1.1. Product identifier

Pattex Powerkleber Stabilit Express, Härter

Contains:

Dibenzoyl peroxide

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

2-Component methyl methacrylate adhesive

1.3. Details of the supplier of the safety data sheet

Henkel AG & Co. KGaA Henkelstr. 67 40589 Düsseldorf

Germany

Phone:	+49 (211) 797 0
Fax-no.:	+49 (211) 798 4008

ua-productsafety.de@henkel.com

1.4. Emergency telephone number

The Henkel information service also provides an around-the-clock telephone service on phone no.+49-(0)211-797-3350 for exceptional cases.

Further information is available at Poison Control Centers.

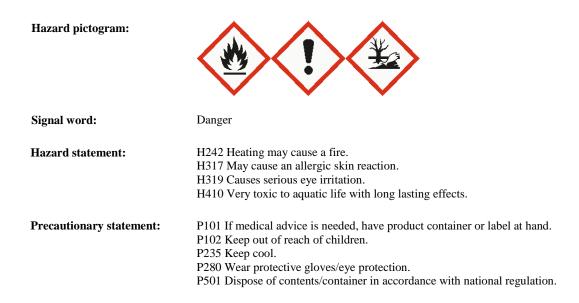
SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):	
Organic peroxides	Type C
H242 Heating may cause a fire.	
Serious eye irritation	Category 2
H319 Causes serious eye irritation.	
Skin sensitizer	Category 1
H317 May cause an allergic skin reaction.	
Acute hazards to the aquatic environment	Category 1
H400 Very toxic to aquatic life.	
Chronic hazards to the aquatic environment	Category 3
H412 Harmful to aquatic life with long lasting effects.	

2.2. Label elements

Label elements (CLP):



2.3. Other hazards

Persons suffering from allergic reactions to peroxides should avoid contact with the product. Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description: 2-Component methyl methacrylate adhesive Base substances of preparation: Dibenzoyl peroxide in inert fillers

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Dibenzoyl peroxide	202-327-6	10- < 25 %	Eye Irrit. 2
94-36-0	01-2119511472-50		H319
			Aquatic Acute 1
			H400
			Skin Sens. 1
			H317
			Aquatic Chronic 2
			H411
			Org. Perox. B
			H241
			M factor (Acute Aquat Tox): 10

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: In case of adverse health effects seek medical advice.

Inhalation: Move to fresh air, consult doctor if complaint persists.

Skin contact:

Rinse with running water and soap. Skin care. Remove contaminated clothes immediately.

Eye contact:

Immediately flush eyes with soft jet of water or eye rinse solution for at least 5 minutes. If pains remains (intensive smarting, sensivity to light, visual disturbance) continue flushing and contact/seek doctor or hospital. Do not rub eyes; mechanical action may cause corneal damage.

Ingestion:

Rinse mouth and throat. Drink 1-2 glasses of water. Seek medical advice.

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

May cause an allergic skin reaction.

Causes serious eye irritation.

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

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media Suitable extinguishing media: carbon dioxide, foam, powder, water spray jet, fine water spray

Extinguishing media which must not be used for safety reasons: High pressure waterjet

5.2. Special hazards arising from the substance or mixture Intensifies fire by releasing oxygen.5.3. Advice for firefighters

Wear protective equipment.

Wear self-contained breathing apparatus.

Additional information:

Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures Avoid contact with skin and eyes. Wear protective equipment.

6.2. Environmental precautions

Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up

Remove mechanically. Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid naked flames, sparking and sources of ignition.

Hygiene measures:

Do not eat, drink or smoke while working. Wash hands before work breaks and after finishing work.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool place in closed original container. Temperatures between 0 °C and + 30 °C Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

7.3. Specific end use(s)

2-Component methyl methacrylate adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Germany

Ingredient [Regulated substance]	ррт	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Calcium sulfate 7778-18-9		6	Exposure limit(s):		TRGS 900
Dibenzoyl peroxide 94-36-0				Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900
Dibenzoyl peroxide 94-36-0		5	Exposure limit(s):	1	TRGS 900

Biological Exposure Indices: None

8.2. Exposure controls:

Respiratory protection: Suitable breathing mask when there is inadequate ventilation. Combination filter: ABEKP (EN 14387) This recommendation should be matched to local conditions.

Hand protection:

Recommended are gloves made from Nitril rubber (Material thickness >0,1 mm, Perforation time < 30s). Gloves should be replaced after each short time contact or contamination. Available at laboratory specialized trade or at pharmacies / chemist's shops.

In the case of longer contact protective gloves made from nitrile rubber are recommended according to EN 374. Perforation time > 10 minutes

material thickness > 0.4 mm

In the case of longer and repeated contact please note that in practice the penetration times may be considerably shorter than those determined according to EN 374. The protective gloves must always be checked for their suitability for use at the specific workplace (e.g. mechanical and thermal stress, product compatibility, antistatic effects, etc.). The gloves must be replaced immediately at the first signs of wear and tear. The information provided by the manufacturers and given in the relevant trade association regulations for industrial safety must always be observed. We recommend that a hand care plan is drawn up in cooperation with a glove manufacturer and the trade association in accordance with the local operating conditions.

Eye protection: Goggles which can be tightly sealed. Protective eye equipment should conform to EN166. Skin protection:

Suitable protective clothing

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties Appearance powder

	fine
	white
Odor	odourless
Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point	No data available / Not applicable
Flash point	No data available / Not applicable
Decomposition temperature	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Density	No data available / Not applicable
Bulk density	450 - 550 g/l
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative)	Insoluble
(23 °C (73.4 °F); Solvent: Water)	
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Strong oxidizing agents. Reducing agents.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

None if used for intended purpose.

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10.5. Incompatible materials

See section reactivity

10.6. Hazardous decomposition products

At higher temperature possible generation of : carbon dioxide Benzoic acid Benzene Biphenyl Phenyl benzoate

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following. Persons suffering from allergic reactions to peroxides should avoid contact with the product.

Eye irritation:

Causes serious eye irritation.

Sensitizing:

May cause an allergic skin reaction.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Dibenzoyl peroxide 94-36-0	LD50	> 5.000 mg/kg	oral		rat	

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Dibenzoyl peroxide 94-36-0	sensitising	Mouse local lymphnod e assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

SECTION 12: Ecological information

General ecological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following. Do not empty into drains, soil or bodies of water.

12.1. Toxicity

Ecotoxicity: Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Value	Value	Acute	Exposure	Species	Method
type		•	time		
LC50	0.06 mg/l		96 h		OECD Guideline
Leso	0,00 mg/1	1 1511	<i>70</i> II		203 (Fish, Acute
					Toxicity Test)
EC50	0,11 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
					202 (Daphnia sp.
					Acute
					Immobilisation
					Test)
NOEC	0,02 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline
					201 (Alga, Growth
EG50	0.07		70.1		Inhibition Test)
EC50	0,07 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline
					201 (Alga, Growth
EC 50	25 mg/l	Postaria	2 h		Inhibition Test) OECD Guideline
EC 50	55 mg/1	Bacterra	5 11		209 (Activated
					Sludge, Respiration
					Inhibition Test)
	type LC50	type LC50 0,06 mg/l EC50 0,11 mg/l NOEC 0,02 mg/l EC50 0,07 mg/l	typeToxicity StudyLC500,06 mg/lFishEC500,11 mg/lDaphniaNOEC0,02 mg/lAlgaeEC500,07 mg/lAlgae	typeToxicity StudytimeLC500,06 mg/lFish96 hEC500,11 mg/lDaphnia48 hNOEC0,02 mg/lAlgae72 hEC500,07 mg/lAlgae72 h	typeToxicity StudytimeLC500,06 mg/lFish96 hEC500,11 mg/lDaphnia48 hDaphnia magnaNOEC0,02 mg/lAlgae72 hPseudokirchnerella subcapitataEC500,07 mg/lAlgae72 hPseudokirchnerella subcapitata

12.2. Persistence and degradability

Hazardous components	Result	Route of	Degradability	Method
CAS-No.		application		
Dibenzoyl peroxide	readily biodegradable	aerobic	> 60 %	OECD Guideline 301 D (Ready
94-36-0				Biodegradability: Closed Bottle
				Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Dibenzoyl peroxide 94-36-0 Dibenzoyl peroxide 94-36-0	3,2	66,6		fish	22 °C	OECD Guideline 305 (Bioconcentration: Flow- through Fish Test) OECD Guideline 117 (Partition Coefficient (n- octanol / water), HPLC Method)

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Dibenzoyl peroxide	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
94-36-0	Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal: Dispose of waste and residues in accordance with local authority requirements.

Disposal of uncleaned packages:

Use packages for recycling only when totally empty.

Waste code

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

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SECTION 14: Transport information

	2077
ADR	3077
RID	3077
ADN	3077
IMDG	3077
IATA	3077

14.2. UN proper shipping name

ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dibenzoyl peroxide)
RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dibenzoyl peroxide)
ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dibenzoyl peroxide)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dibenzoyl peroxide)
IATA	Environmentally hazardous substance, solid, n.o.s. (Dibenzoyl peroxide)

14.3. Transport hazard class(es)

ADR	9
RID	9
ADN	9
IMDG	9
IATA	9

14.4. Packing group

ADR	III
RID	III
ADN	III
IMDG	III
IATA	III

14.5. **Environmental hazards**

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	Marine pollutant
IATA	not applicable

14.6. Special precautions for user

ADR	not applicable
	Tunnelcode: (E)
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

The transport classifications in this section apply generally to packed and bulk goods alike. For containers with a net volume of no more than 5 L for liquid substances or a net mass of no more than 5 kg for solid substances per individual or inner package, the exemptions SP 375 (ADR), 197 (IATA), 969 (IMDG) may be applied, which can result in a deviation from the transport classification for packed goods.

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 VOC content 0,00 %

VOC content (VOCV 814.018 VOC regulation CH)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

National regulations/information (Germany):

WGK:

1, slightly water-endangering product. (German VwVwS of May 17, 1999) Classification in conformity with the calculation method

BG regulations, rules, infos:

Observe the German BG-Chemie data sheet: M023 - Polyesters and epoxy resins BG regulation: BGV B 1 Handling hazardous substances GS 510: 11

Storage class according to TRGS 510:

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text

of all abbreviations indicated by codes in this safety data sheet are as follows:

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.

H411 Toxic to aquatic life with long lasting effects.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Label elements (DPD):

O - Oxidizing



Xi - Irritant



N - Dangerous for the environment



Risk phrases:

R7 May cause fire.

R36 Irritating to eyes.

R43 May cause sensitisation by skin contact.

R50 Very toxic to aquatic organisms.

Safety phrases:

S2 Keep out of the reach of children.

S3/7 Keep container tightly closed in a cool place.

S14 Keep away from reducing agents.

S24/25 Avoid contact with skin and eyes.

S29 Do not empty into drains.

S37 Wear suitable gloves.

S46 If swallowed, seek medical advice immediately and show this container or label.

Contains:

Dibenzoyl peroxide

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.