

Safety Data Sheet

according to UK REACH Regulation

Sebond Smart Zirkon Bonder

Revision date: 12.08.2024

Product code: 640068

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

Sebond Smart Zirkon Bonder

Further trade names

Art.-Nr.: 640068

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

Dental Bonding

1.3. Details of the supplier of the safety data sheet

Company name:	Schütz Dental GmbH	
Street:	Dieselstrasse 5-6	
Place:	D-61191 Rosbach (Germany)	
Telephone:	+49 (0) 6003 814-0	Telefax: +49 (0) 6003 814-906
E-mail:	info@schuetz-dental.de	
Contact person:	Dr. Uwe Krichbaum	Telephone: +49 (0) 6003 814-650
Internet:	www.schuetz-dental.de	
Responsible Department:	Technische Dokumentation	

1.4. Emergency telephone number: +49 (0) 6003 814-0 Schütz Dental (8:00 - 17:00 Uhr) or +49 (0) 6131 19240 University Mainz (24 h)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Flam. Liq. 2; H225
 Skin Irrit. 2; H315
 Skin Sens. 1; H317
 STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

methyl methacrylate

Signal word: Danger**Pictograms:****Hazard statements**

H225 Highly flammable liquid and vapour.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H335 May cause respiratory irritation.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P241 Use explosion-proof electrical/ventilating/lighting equipment.
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 P405 Store locked up.
 P501 Dispose of contents/container to Dispose of waste according to applicable legislation..

Special labelling of certain mixtures

EUH018 In use may form flammable/explosive vapour-air mixture.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:



Hazard statements

H317

Precautionary statements

P261-P501

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name	Quantity
	EC No	Index No
	REACH No	
	Classification (GB CLP Regulation)	
80-62-6	methyl methacrylate	75 - < 100 %
	201-297-1	607-035-00-6
	Flam. Liq. 2, Skin Irrit. 2, Skin Sens. 1, STOT SE 3; H225 H315 H317 H335	

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
80-62-6	201-297-1	methyl methacrylate	75 - < 100 %
	oral: LD50 = 7.872 mg/kg mg/kg		

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. In case of skin irritation, consult a physician.

After contact with eyes

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

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After ingestion

Rinse mouth immediately and drink 1 glass of water. Do NOT induce vomiting. Call a physician immediately.

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

No information available.

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

Water spray jet
Foam
Carbon dioxide (CO₂)
Extinguishing powder

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

No further relevant information available.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit

Additional information

Use water spray jet to protect personnel and to cool endangered containers. 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

General advice

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

For cleaning up

Absorb with liquid-binding material (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

Keep container tightly closed.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately.

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7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up.
Recommended storage temperature 10 - 25 °C

Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

Dental Bonding

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
80-62-6	Methyl methacrylate	50	208		TWA (8 h)	WEL
		100	416		STEL (15 min)	WEL

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye protection/face protection.

Hand protection

Tested protective gloves must be worn
Butyl caoutchouc (butyl rubber)
NBR (Nitrile rubber)
Permeation time (maximum wear duration): 0,3 mm: 60 min.
Permeation time (maximum wear duration): 0,11 mm: 10 min.

Skin protection

Use of 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:	Liquid
Colour:	colourless
Melting point/freezing point:	- 48 °C
Boiling point or initial boiling point and boiling range:	101 °C
Flammability:	not determined
Lower explosion limits:	2,1

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Upper explosion limits:	12,5
Flash point:	10 °C
Auto-ignition temperature:	430 °C
Decomposition temperature:	not determined
pH-Value:	not determined
Viscosity / kinematic:	not determined
Water solubility:	1,6 g/l
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	not determined
Vapour pressure: (at 20 °C)	47 hPa
Density:	0,94 g/cm ³
Relative vapour density:	not determined
Particle characteristics:	not applicable

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive. In use, may form flammable/explosive vapour-air mixture.

Oxidizing properties

The product is not: oxidising.

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

Hazardous polymerisation:

10.4. Conditions to avoid

none

10.5. Incompatible materials

Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
80-62-6	methyl methacrylate				
	oral	LD50 7.872 mg/kg mg/kg			

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

May cause an allergic skin reaction. (methyl methacrylate)

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation. (methyl methacrylate)

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards**Other information**

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

SECTION 12: Ecological information**12.1. Toxicity**

Based on available data, the classification criteria are not met.

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

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Disposal recommendations

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

Contaminated packaging

Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 1247
14.2. UN proper shipping name:	METHYL METHACRYLATE MONOMER, STABILIZED
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3



Classification code:	F1
Special Provisions:	386 676
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	339
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 1247
14.2. UN proper shipping name:	METHYL METHACRYLATE MONOMER, STABILIZED
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3



Classification code:	F1
Special Provisions:	386 676
Limited quantity:	1 L
Excepted quantity:	E2

Marine transport (IMDG)

14.1. UN number or ID number:	UN 1247
14.2. UN proper shipping name:	METHYL METHACRYLATE MONOMER, STABILIZED
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3



Special Provisions:	386
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-E, S-D
Segregation group:	3 - bromates

Air transport (ICAO-TI/IATA-DGR)

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14.1. UN number or ID number:	UN 1247
14.2. UN proper shipping name:	METHYL METHACRYLATE MONOMER, STABILIZED
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3



Special Provisions:	A209
Limited quantity Passenger:	1 L
Passenger LQ:	Y341
Excepted quantity:	E2
IATA-packing instructions - Passenger:	353
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	364
IATA-max. quantity - Cargo:	60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: Combustible liquid.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

Other applicable information

Hazchem code: 3YE

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 1 - slightly hazardous to water

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

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): 1.

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Abbreviations and acronyms

Flam. Liq: Flammable liquids
 Skin Irrit: Skin irritation
 Skin Sens: Skin sensitisation
 STOT SE: Specific target organ toxicity - single exposure
 CLP: Classification, labelling and Packaging
 REACH: Registration, Evaluation and Authorization of Chemicals
 GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
 UN: United Nations
 EC/EEC: European Community/European Economic Community
 EU: European Union
 CAS: Chemical Abstracts Service
 DNEL: Derived No Effect Level
 DMEL: Derived Minimal Effect Level
 PNEC: Predicted No Effect Concentration
 ATE: Acute toxicity estimate
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 M-factor: Multiplying factor
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Flam. Liq. 2; H225	
Skin Irrit. 2; H315	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H335 May cause respiratory irritation.
 EUH018 In use may form flammable/explosive vapour-air mixture.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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