

Safety Data Sheet according to EC-Regulation 91/155/EEC

1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

MKT injection adhesive VMU component A (resin) MKT injection adhesive VMU component B (hardener)

Use of the substance/preparation

MKT injection system VMU

Company/undertaking identification

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Emergency telephone / Office for advice

Advisory office in case of poisoning:

Tel.: +49 89 / 19240

Telephone number of the company in case of emergencies:

Tel. --

2. Composition/information on ingredients

2.1 Chemical name	content %	symbol	R-phrases	EINECS, ELINCS
A				
Hexamethylene dimethacrylate	1 -< 10	Xi	36/37/38	229-551-7
B				
Dibenzoyl peroxide	1 -< 20	E/Xi	2-36-43	202-327-6
2-ethylhexyl benzoate	1 -< 20	---	53	226-641-8
1,2-Cyclohexane dicarboxylic acid diisononyl ester	20 - 50	Xi	38	431-890-2
Oxydipropyl dibenzoate	0,1 -< 2,5	N	51-53	248-258-5
For complete wording of the R-phrases, refer to point 16.				

3. Hazards identification

3.1 To people

See point 11 and 15.

A

Preparation is not classified as hazardous in the sense of directive 1999/45/EC.

B

Preparation is classified as hazardous in the sense of directive 1999/45/EC.

May cause sensitization by skin contact.

May cause fire.

Irritation of the skin.

3.2 To the environment

See point 12.

4. First aid measures

4.1 Inhalation

Supply person with fresh air and consult doctor according to symptoms.

Remove person from danger area.

Keep Data Sheet available.

4.2 Eye contact

Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available.

4.3 Skin contact

Wash thoroughly with soap and copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

4.4 Ingestion

Rinse the mouth thoroughly with water.

Give copious water to drink - consult doctor immediately.

Keep Data Sheet available.

4.5 Special resources necessary for first aid

n.g.

5. Fire-fighting measures

5.1 Suitable extinguishing media

A

Water jet spray

Foam

CO2

Dry extinguisher

B

Cool container at risk with water.

CO2

Exinction powder

Water jet spray

Large fire:

Alcohol resistant foam

Water jet spray

5.2 Extinguishing media which must not be used for safety reasons

High volume water jet

5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

In case of fire the following can develop:

Oxides of carbon

Toxic gases

Organic decomposition products

5.4 Special protective equipment for fire-fighters

Protective respirator with independent air supply

Full protection, if necessary

5.5 Further information

Dispose of contaminated extinction water according to official regulations.

6. Accidental release measures

Refer to point 13. and for personal protection refer to point 8.

6.1 Personal precautions

Remove possible causes of ignition - do not smoke.

Ensure sufficient supply of air.

Avoid contact with eyes or skin.

6.2 Environmental measures

Prevent from entering drainage system.

If accidental entry into drainage system occurs, inform responsible authorities.

If leakage occurs, dam up.

Prevent surface and ground-water infiltration, as well as ground penetration.

6.3 Methods for cleaning up

Collect using absorbant material (e.g. Universal binding medium), and dispose of according to point 13.

Or:

Collect mechanically and dispose of according to point 13.

7. Handling and storage

7.1 Handling

Tips for safe handling:

See point 6.1

Only use working methods according to operating instructions.

Keep away from sources of ignition - Do not smoke.

Ensure good ventilation.

Observe directions on label and instructions for use.

General hygiene measures for the handling of chemicals are applicable.

7.2. Storage

Requirements for storage rooms and containers:

A/B

Not to be stored in gangways or stair wells.

Store products only unopened, in original packing.

Do not store with highly flammable, flammable, or self-igniting materials.

Observe regulations for keeping separated.

B

Observe the special regulations for organic peroxides.

Special storage conditions:

See point 10.2

Protect against moisture and store closed.

Store cool

Protect from direct sunlight and warming.

8. Exposure controls/personal protection

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

B

Chemical Name	Dibenzoyl peroxide	
WEL-TWA: 5 mg/m ³	WEL-STEL: ---	---
BMGV: ---	Other information: ---	
Chemical Name	Quartz	
WEL-TWA: 0,3 mg/m ³ (silica, respirable, crystalline)	WEL-STEL: ---	---
BMGV: ---	Other information: ---	
Chemical Name	Silica, amorphous	
WEL-TWA: 6 mg/m ³ (total inh. dust), 2,4 mg/m ³ (resp. dust)	WEL-STEL: ---	---
BMGV: ---	Other information: ---	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AG = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BG = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

8.1 Respiratory protection:

Filter A2 P2 (EN 141)

If applicable

Breathing mask with fine-dust filter (EN 143).

8.2 Hand protection:

Protective nitrile gloves (EN 374)

Permeation time (penetration time) in minutes:

A 240, B 480

Suitable are, e.g., safety gloves from KCL GmbH Co., D-36124

Eichenzell, e-mail vertrieb@kcl.de, following specifications:

706 Lapren, 720 Camapren, 730 Camatril Velours

8.3 Eye protection:

8.4 Skin protection:

If OES or MEL is exceeded.

Protective plastic gloves (EN 374).

Tight fitting protective goggles with side protection (EN 166).

Protective working garments (e.g. safety shoes EN 344, long-sleeved protective working garments)

According to operation.

Additional information on hand protection - No tests have been performed.

Selection made for preparations according to the best available knowledge and information on the ingredients.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

9. Physical and chemical properties

Physical state:	Paste
Colour:	
A	
Light	
B	
Black	
Odour:	Characteristic
pH-value undiluted:	n.v.
Boiling point/range (°C):	
A	
> 100	
(Particulars of main substances contained)	
Flash point (°C):	
A	
> 100	
(Particulars of main substances contained)	
B	
n.a.	
Oxidising properties:	
A	
n.a.	
B	
Yes	
Density (g/ml):	
A	
Not detected	
B	
Not detected	
Solubility in water:	
A	
k.D.v.	
B	
Insoluble	

10. Stability and reactivity

10.1 Conditions to avoid

See point 7

A/B

Protect from humidity.

Heating, open flame, ignition sources

B

Autoaccelerated decomposition:

~ > +60°C

(Particulars of main substances contained)

10.2 Materials to avoid

See point 7

A

Avoid contact with oxidizing agents.

Avoid contact with other chemicals.

B

Avoid contact with other chemicals.

Decomposition:

14.a Keep away from dirt, rust, alkalis, acids and accelerators.

Heavy metal salts

Amines

10.3 Hazardous decomposition products

See point 5.3

11. Toxicological information

11.1 Acute toxicity and immediate effects

Ingestion, LD50 rat oral (mg/kg):

n.v.

Inhalation, LC50 rat inhal.(mg/l/4h):

n.v.

Skin contact, LD50 rat dermal (mg/kg):

n.v.

A

n.d.a.

B

Irritant

Eye contact: n.v.

11.2 Delayed and chronic effects

Sensitization:

A

n.d.a.

B

Yes (skin contact)

Carcinogenicity: n.g.

Mutagenicity: n.g.

Reproductive toxicity: n.g.

Narcosis: n.g.

11.3. Further information

A

No classification according to calculation procedure.

The following may occur:

Irritation of the eyes

Irritation of the respiratory tract

Irritation of the skin.

12. Ecological information

Water hazard class (Germany):

2

Self classification:

Yes (VwVwS)

Persistence and degradability:

B

CE50/30min. 35mg/l*

* Dibenzoyl peroxide

Behaviour in sewage plants:

n.v.

AOX k.D.v.

Aquatic toxicity:

n.v.

Ecological toxicity:

n.v.

13. Disposal considerations**13.1. for the material / preparation / residue**

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances.

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

08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09

16 05 08 discarded organic chemicals consisting of or containing dangerous substances

Recommendation:

Pay attention to local and national official regulations

E.g. dispose at suitable refuse site.

E.g. suitable incineration plant.

13.2 for contaminated packing material

See point 13.1

Pay attention to local and national official regulations

15 01 01 paper and cardboard packaging

15 01 02 plastic packaging

14. Transport information**General statements**

B

UN-Number:

3108

Road/Rail-transport (ADR/RID)

Class/packing-group:

5.2/-

UN 3108 ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)

Classification code:

P1

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Revision: 19.04.2006 Replaces the version of: 05.04.2006 PDF date: 19.04.2006

MKT injection adhesive VMU component A (resin)

MKT injection adhesive VMU component B (hardener)

LQ: 11

Transport by sea

IMDG-code: 5.2/- (class/packing-group)

EmS: F-J, S-R

Marine Pollutant: n.a

ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE, BENZYL BUTYL PHTHALATE)

Transport by air

IATA: 5.2/-/ (class/secondary danger/packing-group)

Organic peroxide type E, solid (DIBENZOYL PEROXIDE)

Additional information:

A

Non-dangerous material according to Transport Regulations.

15. Regulatory information

Classification according to Dangerous Product Regulations incl. EC Directives (67/548/EEC and 1999/45/EC)

Symbols:

A

Not applicable

B

O/Xi

Indications of danger:

B

Oxidizing

Irritant

R-phrases:

A

--

B

7 May cause fire.

38 Irritating to skin.

43 May cause sensitization by skin contact.

S-phrases:

A

--

B

3/7 Keep container tightly closed in a cool place.

14.a Keep away from dirt, rust, alkalis, acids and accelerators.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

50.a Do not mix with accelerators for peroxides or reducing agents.

35 This material and its container must be disposed of in a safe way.

Additions:

A

n.a.

B

Dibenzoyl peroxide

Observe restrictions: Yes

Observe youth employment law (German regulation).

Observe restrictive guidelines 76/769/EEC, 1999/51/EC, 1999/77/EC

16. Other information

These details refer to the product as it is delivered.

Storage class VCI (Germany):

A 10 - 13 B 5.2

Revised points:

5, 6, 7, 9, 10, 11, 15, 16

B

Observe VBG B4

Observe incident regulations.

The following phrases represent the prescribed R-phrases for the ingredients (designated in point 2).

36/37/38 Irritating to eyes, respiratory system and skin.

2 Risk of explosion by shock, friction, fire or other sources of ignition.

36 Irritating to eyes.

43 May cause sensitization by skin contact.

53 May cause long-term adverse effects in the aquatic environment.

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Revision: 19.04.2006 Replaces the version of: 05.04.2006 PDF date: 19.04.2006

MKT injection adhesive VMU component A (resin)

MKT injection adhesive VMU component B (hardener)

38 Irritating to skin.

51 Toxic to aquatic organisms.

Legend:

n.a. = not applicable / n.v., k.D.v. = not available / n.g. = not checked

OES = Occupational exposure standard / MEL = Maximum exposure limit / BMGV = Biological monitoring guidance value

AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany) / BGW = "Biologischer Grenzwert" (biological limit value, Germany)

VbF = Regulations for flammable liquids (Austria)

WGK = water hazard class (Germany) - WGK 3 = very hazardous, WGK 2 = hazardous, WGK 1 = slightly hazardous to water

VOC = Volatile organic compounds / AOX = Adsorbable organic halogen compounds

VwVwS = Administrative Order relating to substances hazardous to water (Germany)

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by:

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