

# Safety Data Sheet according to (EC) No 1907/2006 - ISO 11014-1

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**MKT injection adhesive VM-K**

SDS no. : 340200

V001.0

Revision: 30.01.2009

printing date: 10.02.2009

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

**Trade name:**

MKT injection adhesive VM-K, Comp. A

**Intended use:**

MKT injection system VM-K

**Company name:**

MKT Metall-Kunststoff-Technik GmbH & Co. KG

Auf dem Immel 2

D-67685 Weilerbach

Phone: +49 (0) 6374/9116-0

Fax-no.: +49 (0) 6374/9116-60

E-Mail: Responsible for the safety data sheet: mkt@mkt-duebel.de

**Emergency information:**

Advisory office in case of poisoning: +49 (0) 89/19240 (Munich)

## 2. Hazards identification

The product is classified as hazardous within the meaning of the valid (EU) preparation directive.

Xi - Irritant

R36/38 Irritating to eyes and skin.

R43 May cause sensitization by skin contact.

Persons suffering from allergic reactions to acrylates should avoid contact with the product.

Solvents contained in the product evaporate during processing and their vapors can form explosive/highly inflammable air/vapor mixtures.

Pregnant women should absolutely avoid breathe in and skin contact.

## 3. Composition / information on ingredients

**General chemical description:**

Resin

**Base substances of preparation:**

Methacrylate

Inorganic fillers

**Declaration of ingredients according to (EC) No 1907/2006:**

Hazardous components CAS-No.	EINECS	content	Classification
2-Hydroxyethyl methacrylate 868-77-9	212-782-2	> 1 - < 40 %	Xi - Irritant; R36/38 R43
Vinyltoluene 25013-15-4	246-562-2	> 1 - < 10 %	Xn - Harmful; R20 Xi - Irritant; R36/37/38 R10
1,1'-(p-Tolylimino)dipropan-2-ol 38668-48-3	254-075-1	> 0,1 - < 1 %	R52/53 T - Toxic; R25 Xi - Irritant; R36

For full text of the R-Phrases indicated by codes see section 16 'Other Information'.

Substances without classification may have community workplace exposure limits available.

#### 4. First aid measures

**General information:**

In case of adverse health effects seek medical advice.

**Inhalation:**

Move to fresh air.

**Skin contact:**

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

**Eye contact:**

Rinse immediately with plenty of running water, seek medical advice if necessary.

**Ingestion:**

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

#### 5. Fire fighting measures

**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

**Special protection equipment for firefighters:**

Wear self-contained breathing apparatus.  
Wear protective equipment.

**Hazardous combustion products:**

Carbon dioxide., carbon monoxide

**Additional information:**

Dispose of combustion residues and contaminated fire-fighting water in accordance with statutory regulations.

#### 6. Accidental release measures

**Personal precautions:**

Avoid contact with skin and eyes.  
Keep away from sources of ignition.  
Ensure adequate ventilation.  
Danger of slipping on spilled product.  
Do not breathe solvent vapors.

**Environmental precautions:**

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

**Clean-up methods:**

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

#### 7. Handling and storage

**Handling:**

Avoid skin and eye contact.  
Ventilate working rooms thoroughly. Avoid naked flames, sparking and sources of ignition. Switch off electrical devices. Do not smoke, do not weld. Do not empty waste into waste water drains.

**Storage:**

- Store in sealed original container protected against moisture.
- Store in a cool, dry place.
- Storage at 5 to 25°C is recommended.
- Keep container in a well ventilated place.
- Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

**8. Exposure controls / personal protection**

**Respiratory protection:**

Suitable breathing mask when there is inadequate ventilation.

**Hand protection:**

For shorttime contact (e.g. as protection against splashes) protective gloves made from butyl rubber are recommended according to EN 374.  
material thickness > 0.7 mm  
Perforation time > 60 minutes  
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.

**Skin protection:**

suitable protective clothing

**General protection and hygiene measures:**

- Wash off any dirt that gets onto the skin with lots of soap and water, skin care.
- Do not eat, drink or smoke while working.
- Wash hands before work breaks and after finishing work.

**9. Physical and chemical properties**

**General characteristics:**

Appearance	Paste pasty light beige
Odor:	Characteristic

**Phys./chem. properties:**

Density (23 °C (73.4 °F))	1,57 g/cm <sup>3</sup>
Solubility (qualitative) (20 °C (68 °F); Solvent: Water)	Partially miscible
Explosion limit lower [vol%]	0,9 % (V)
upper [vol%]	45 % (V)

**10. Stability and reactivity**

**Conditions to avoid:**

No decomposition if used according to specifications.

**Materials to avoid:**

Reacts with strong oxidants.

**Hazardous decomposition products:**

None known

## 11. Toxicological information

**General toxicological information:**

To the best of our knowledge no harmful effects are to be expected if the product is handled and used properly. Persons suffering from allergic reactions to acrylates should avoid contact with the product.

**Skin irritation:**

Primary skin irritation: irritating

**Eye irritation:**

Primary eye irritation: irritating

**Sensitizing:**

May cause sensitization by skin contact.

## 12. Ecological information

**Persistence and degradability:**

**Ultimate biodegradation:**

The total of the organic components contained in the product achieve > 60% BOD/COD or CO<sub>2</sub> liberation, or > 70% DOC reduction in tests for ease of degradability - threshold values for 'readily degradable' (e.g. to OECD method 301).

**General ecological information:**

Do not empty into drains, soil or bodies of water.

## 13. Disposal considerations

**Product disposal:**

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

After curing with component B :

Can be added to household waste in small quantities.

The valid EEC waste code numbers are not product-related but are largely source-related. The manufacturer is therefore unable to specify EEC waste codes for the articles or products used in the various sectors. These can be requested from the manufacturer.

**Disposal of uncleaned packages:**

Only well-emptied containers with dried or cured product residues and without solvent vapors can be recycled.

## 14. Transport information

**General information:**

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR.

## 15. Regulations - classification and identification

### Indication of danger:

Xi - Irritant



### Contains

2-Hydroxyethyl methacrylate

### Risk phrases:

R36/38 Irritating to eyes and skin.  
R43 May cause sensitization by skin contact.

### Safety phrases:

S2 Keep out of the reach of children.  
S24/25 Avoid contact with skin and eyes.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S37 Wear suitable gloves.  
S46 If swallowed, seek medical advice immediately and show this container or label.

## 16. Other information

The labelling of the product is indicated in Section 15. The full text of the R-phrases indicated by codes in this safety data sheet are as follows:

R10 Flammable.  
R20 Harmful by inhalation.  
R25 Toxic if swallowed.  
R36 Irritating to eyes.  
R36/37/38 Irritating to eyes, respiratory system and skin.  
R36/38 Irritating to eyes and skin.  
R43 May cause sensitization by skin contact.  
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 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.

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MKT injection adhesive VM-K, Comp. B

**Intended use:**

MKT injection system VM-K

**Company name:**

MKT Metall-Kunststoff-Technik GmbH & Co. KG

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D-67685 Weilerbach

Phone: +49 (0) 6374/9116-0

Fax-no.: +49 (0) 6374/9116-60

E-Mail: Responsible for the safety data sheet: mkt@mkt-duebel.de

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## 2. Hazards identification

The product is classified as hazardous within the meaning of the valid (EU) preparation directive.

Xi - Irritant

R43 May cause sensitization by skin contact.

Persons suffering from allergic reactions to peroxides should avoid contact with the product.

## 3. Composition / information on ingredients

**General chemical description:**

hardener component

**Base substances of preparation:**

Dibenzoyl peroxide

Inorganic fillers

**Declaration of ingredients according to (EC) No 1907/2006:**

Hazardous components CAS-No.	EINECS	content	Classification
Dibenzoyl peroxide 94-36-0	202-327-6	>= 10 - < 20 %	E - Explosive; R3 O - Oxidizing; R7 Xi - Irritant; R36, R43
Glycerol 56-81-5	200-289-5	>= 1 - <= 10 %	
2-Ethylhexyl benzoate 5444-75-7	226-641-8	>= 1 - < 10 %	R53
Oxydipropyl dibenzoate 27138-31-4	248-258-5	>= 1 - < 2,5 %	N - Dangerous for the environment; R51/53

For full text of the R-Phrases indicated by codes see section 16 'Other Information'.

Substances without classification may have community workplace exposure limits available.

## 4. First aid measures

**General information:**

In case of adverse health effects seek medical advice.

**Inhalation:**

Move to fresh air.

**Skin contact:**

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

**Eye contact:**

Rinse immediately with plenty of running water, seek medical advice if necessary.

**Ingestion:**

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

## 5. Fire fighting measures

**Suitable extinguishing media:**

carbon dioxide  
Powder  
fine water spray  
water spray jet

**Extinguishing media which must not be used for safety reasons:**

Foam.  
High pressure waterjet

**Special protection equipment for firefighters:**

Wear self-contained breathing apparatus.  
Wear protective equipment.

**Hazardous combustion products:**

Carbon dioxide., carbon monoxide

**Additional information:**

Dispose of combustion residues and contaminated fire-fighting water in accordance with statutory regulations.

## 6. Accidental release measures

**Personal precautions:**

Avoid contact with skin and eyes.  
Keep away from sources of ignition.  
Ensure adequate ventilation.

**Environmental precautions:**

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

**Clean-up methods:**

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

## 7. Handling and storage

**Handling:**

Avoid skin and eye contact.  
Ventilate working rooms thoroughly. Avoid naked flames, sparking and sources of ignition. Switch off electrical devices. Do not smoke, do not weld. Do not empty waste into waste water drains.  
Throw out sparks on burning.

**Storage:**

- Store in sealed original container protected against moisture.
- Store in a cool place in closed original container.
- Store in a cool, dry place.
- Storage at 5 to 25°C is recommended.
- store in dark
- Do not store together with food or other consumables (coffee, tea, tobacco, etc.).
- Do not store together with highly flammable substances (F or F+).

**8. Exposure controls / personal protection**

**Components with specific control parameters for workplace:**

- Valid for
  - Great Britain
- Basis
  - UK EH40 WELs

Ingredient	ppm	mg/m <sup>3</sup>	Type	Category	Remarks
DIBENZOYL PEROXIDE 94-36-0		5	Time Weighted Average (TWA).		EH40 WEL
GLYCEROL, MIST 56-81-5		10	Time Weighted Average (TWA).		EH40 WEL

**Engineering controls:**

No further information, see section 7.

**Respiratory protection:**

Suitable breathing mask when there is inadequate ventilation.

**Hand protection:**

For shorttime contact (e.g. as protection against splashes) protective gloves made from butyl rubber are recommended according to EN 374.  
 material thickness > 0.7 mm  
 Perforation time > 60 minutes  
 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.

**Skin protection:**

suitable protective clothing

**General protection and hygiene measures:**

- Wash off any dirt that gets onto the skin with lots of soap and water, skin care.
- Do not eat, drink or smoke while working.
- Wash hands before work breaks and after finishing work.



## 9. Physical and chemical properties

### General characteristics:

Appearance	Paste solid
Odor:	Black Characteristic

### Phys./chem. properties:

Density (20 °C (68 °F))	0,97 - 1,03 g/cm <sup>3</sup>
Solubility (qualitative) (20 °C (68 °F); Solvent: Water)	Insoluble

## 10. Stability and reactivity

### Conditions to avoid:

Temperatures over appr. 80 °C

### Materials to avoid:

Reaction with oxidants.

### Hazardous decomposition products:

None known

## 11. Toxicological information

### General toxicological information:

Persons suffering from allergic reactions to peroxides should avoid contact with the product.

### Eye irritation:

Primary eye irritation: slightly irritating, does not require labeling

### Sensitizing:

May cause sensitization by skin contact.

## 12. Ecological information

### General ecological information:

Do not empty into drains, soil or bodies of water.

## 13. Disposal considerations

### Product disposal:

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

After curing with component A :

Can be added to household waste in small quantities.

The valid EEC waste code numbers are not product-related but are largely source-related. The manufacturer is therefore unable to specify EEC waste codes for the articles or products used in the various sectors. These can be requested from the manufacturer.

### Disposal of uncleaned packages:

Only well-emptied containers with dried or cured product residues and without solvent vapors can be recycled.

## 14. Transport information

### Road transport ADR:

Class: 5.2  
Packaging group:  
Classification code: P1  
Hazard ident. number:  
UN no.: 3108  
Label: 5.2  
Technical name: ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)

### Railroad transport RID:

Class: 5.2  
Packaging group:  
Classification code: P1  
Hazard ident. number: 539  
UN no.: 3108  
Label: 5.2  
Technical name: ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)

### Inland water transport ADN:

Class: 5.2  
Packaging group:  
Classification code: P1  
Hazard ident. number:  
UN no.: 3108  
Label: 5.2  
Technical name: ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)

### Marine transport IMDG:

Class: 5.2  
Packaging group:  
UN no.: 3108  
Label: 5.2  
EmS: F-J ,S-R  
Seawater pollutant:  
Proper shipping name: ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)

### Air transport IATA:

Class: 5.2  
Packaging group:  
Packaging instructions (passenger) 510  
Packaging instructions (cargo) 513  
UN no.: 3108  
Label: 5.2  
Proper shipping name: Organic peroxide type E, solid (Dibenzoyl peroxide)

## 15. Regulations - classification and identification

### Indication of danger:

Xi - Irritant



### Contains

Dibenzoyl peroxide

### Risk phrases:

R43 May cause sensitization by skin contact.

### Safety phrases:

S2 Keep out of the reach of children.

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

S14 Keep away from dirt, rust, alkalis, acids and accelerators.

S24/25 Avoid contact with skin and eyes.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

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

## 16. Other information

The labelling of the product is indicated in Section 15. The full text of the R-phrases indicated by codes in this safety data sheet are as follows:

R3 Extreme risk of explosion by shock, friction, fire or other sources of ignition.

R36 Irritating to eyes.

R43 May cause sensitization by skin contact.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R53 May cause long-term adverse effects in the aquatic environment.

R7 May cause fire.

### 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.