... eine starke Verbindung

DECLARATION OF PERFORMANCE
DoP No. MKT-310 - en

1. Unique identification code of the product-type: **MKT Injection System VMZ and VMZ-IG**

2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4):
ETA-04/0092, Annex 3 und 24
Batch number: see packaging of the product.

3. Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer:

generic type	torque controlled bonded anchor
for use in	cracked and non-cracked concrete C20/25 - C50/60 (EN 206)
option	1
loading	static or quasi-static, seismic category C2
material	<u>hot-dip galvanized steel:</u> dry internal conditions only covered sizes: VMZ: M8, M10, M12, M16, M20, M24 <u>zinc-plated steel:</u> dry internal conditions only covered sizes: VMZ: M8, M10, M12, M16, M20, M24 VMZ-IG: M6, M8, M10, M12, M16, M20 <u>stainless steel (marking A4):</u> internal and external use without particular aggressive conditions covered sizes: VMZ: M8, M10, M12, M16, M20, M24 VMZ-IG: M6, M8, M10, M12, M16, M20 <u>high corrosion resistant steel (marking HCR):</u> internal and external use with particular aggressive conditions covered sizes: VMZ: M8, M10, M12, M16, M20, M24 VMZ-IG: M6, M8, M10, M12, M16, M20
temperature range (if applicable)	Range I: -40 °C to +80 °C Range II: -40 °C to +120 °C

4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5):

MKT Metall-Kunststoff-Technik GmbH & Co. KG
Auf dem Immel 2
D - 67685 Weilerbach

5. Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2): --

6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V: **System 1**

7. In case of the declaration of performance concerning a construction product covered by a harmonised standard: --

8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:

Deutsches Institut für Bautechnik, Berlin

issued

ETA-04/0092

on the basis of

ETAG 001-5

The notified body 0756-CPD performed under system 1:

(i) determination of the product type on the basis of type testing (including sampling), type calculation, tabulated values or descriptive documentation of the product;

(ii) initial inspection of the manufacturing plant and of factory production control;

(iii) continuous surveillance, assessment and evaluation of factory production control.

and issued: certificate of conformity 0756-CPD-0020

9. Declared performance:

Essential Characteristics	**Design Method**	**Performance**		**Harmonized Technical Specification**
		VMZ-A	**VMZ-IG**	
characteristic resistance for tension (static or quasi-static)	ETAG 001, Annex C	ETA-04/0092, Annex 11, 12	ETA-04/0092, Annex 29	ETAG 001
	CEN/TS 1992-4	ETA-04/0092, Annex 16, 17	ETA-04/0092, Annex 31	
characteristic resistance for shear (static or quasi-static)	ETAG 001, Annex C	ETA-04/0092, Annex 14, 15	ETA-04/0092, Annex 30	
	CEN/TS 1992-4	ETA-04/0092, Annex 19, 20	ETA-04/0092, Annex 32	
characteristic resistance for seismic action	TR 045	ETA-04/0092, Annex 21, 22	--	
minimum spacing and minimum edge distance	ETAG 001, Annex C	ETA-04/0092, Annex 10	ETA-04/0092, Annex 28	
	CEN/TS 1992-4	ETA-04/0092, Annex 10	ETA-04/0092, Annex 28	
displacement for serviceability limit state	ETAG 001, Annex C	ETA-04/0092, Annex 13, 14, 15	ETA.04/0092, Annex 30	
	CEN/TS 1992-4	ETA-04/0092, Annex 18, 19, 20	ETA-04/0092, Annex 32	

Where pursuant to Article 37 or 38 in the Specific Technical Documentation has been used, the requirements with which the product complies: --

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Lore Weustenhagen
(General Manager)
Weilerbach, 30.06.2013

i.V.

Dipl.-Ing. Detlef Bigalke
(Head of product development)

Annex: Safety Data Sheet

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

MKT injection adhesive VMZ

V002.0
Revision: 19.07.2011
printing date: 13.09.2011

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

Product identifier:
MKT injection adhesive VMZ, Comp A

Relevant identified uses of the substance or mixture and uses advised against:
Intended use:
compound mortar

Company name:
MKT Metall-Kunststoff-Technik GmbH & Co. KG
Auf dem Immel 2
D-67685 Weilerbach
Phone: +49 (0) 6374/9116-0
E-Mail: Responsible for the safety data sheet: mkt@mkt-duebel.de

SECTION 2: Hazards identification

Classification of the substance or mixture:

Classification (DPD):
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Label elements (DPD):
Risk phrases:
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:
S2 Keep out of the reach of children.
S46 If swallowed, seek medical advice immediately and show this container or label.
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

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

SECTION 3: Composition/information on ingredients

General chemical description:
Resin
Base substances of preparation:
Inorganic fillers
Methacrylates

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

Hazardous components CAS-No.	EINECS REACH-Reg No.	content	Classification
Hexanediol dimethacrylate 6606-59-3	229-551-7	< 10 %	Specific target organ toxicity - single exposure 3 H335 Serious eye irritation 2 H319 Skin irritation 2 H315
N,N-Diethylaniline 91-66-7	202-088-8	< 0,5 %	Acute toxicity 3; Oral H301 Acute toxicity 3; Inhalation H331 Acute toxicity 3; Dermal H311 Specific target organ toxicity - repeated exposure 2 H373 Chronic hazards to the aquatic environment 2 H411

Only dangerous ingredients for which a CLP classification is already available are displayed in this table.
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.

Declaration of ingredients according to DPD (EC) No 1999/45:

Hazardous components CAS-No.	EINECS REACH-Reg No.	content	Classification
Hexanediol dimethacrylate 6606-59-3	229-551-7	< 10 %	Xi - Irritant; R36/37/38 N - Dangerous for the environment; R51/53
N,N-Diethylaniline 91-66-7	202-088-8	< 0,5 %	T - Toxic; R23/24/25 N - Dangerous for the environment; R51, R53 R33
4-tert-Butylpyrocatechol 98-29-3	202-653-9	< 1 %	C - Corrosive; R34 Xn - Harmful; R21/22 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.

SECTION 4: First aid measures

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:
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.

Most important symptoms and effects, both acute and delayed:
No data available.

Indication of any immediate medical attention and special treatment needed:
See section: Description of first aid measures

SECTION 5: Firefighting measures

Extinguishing media:
Suitable extinguishing media:
carbon dioxide
powder
Fine water spray
water spray jet

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

Special hazards arising from the substance or mixture:
In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO2) can be released.

Advice for firefighters:
Wear self-contained breathing apparatus.
Wear protective equipment.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:
Avoid contact with eyes.
Ensure adequate ventilation.
Wear protective equipment.
Danger of slipping on spilled product.

Environmental precautions:
Do not empty into drains / surface water / ground water.

Methods and material for containment and cleaning up:
Remove mechanically.
Dispose of contaminated material as waste according to Chapter 13.

Reference to other sections:
See advice in chapter 8

SECTION 7: Handling and storage

Precautions for safe handling:
Avoid skin and eye contact.
Ensure that workrooms are adequately ventilated.

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

Conditions for safe storage, including any incompatibilities:
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.).

Specific end use(s):
compound mortar

SECTION 8: Exposure controls/personal protection

Control parameters:
Valid for
Great Britain

None

Exposure controls:

Respiratory protection:
When processing large amounts.
Suitable breathing mask when there is inadequate ventilation.
Filter: A - P2

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.

Eye protection:
Goggles which can be tightly sealed.

Skin protection:
Suitable protective clothing

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties:

Appearance	paste pasty light beige
Odor	characteristic
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 (23 °C (73.4 °F))	1,55 g/cm3
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (20 °C (68 °F); Solvent: Water)	practically insoluble
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

Other information:

No data available / Not applicable

SECTION 10: Stability and reactivity

Reactivity:
Reaction with oxidants.
Reaction with strong acids.

Chemical stability:
Stable under recommended storage conditions.

Possibility of hazardous reactions:
See section reactivity

Conditions to avoid:
None if used for intended purpose.

Incompatible materials:
None if used properly.

Hazardous decomposition products:
None known

SECTION 11: Toxicological information

General toxicological information:
The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. 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.

SECTION 12: Ecological information

General ecological information:
The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. 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.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
N,N-Diethylaniline 91-66-7	LC50	16,4 mg/l	Fish	96 h	Pimephales promelas	EPA OPP 72-1 (Fish Acute Toxicity Test)
N,N-Diethylaniline 91-66-7	EC50	1 - 1,6 mg/l	Daphnia	48 h	Daphnia magna	EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids)
N,N-Diethylaniline 91-66-7	EC50	5,6 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	
4-tert-Butylpyrocatechol 98-29-3	EC50	1,4 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
N,N-Diethylaniline 91-66-7		aerobic	> 90 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
N,N-Diethylaniline 91-66-7		17 - 125	56 d	Cyprinus carpio		
N,N-Diethylaniline 91-66-7	3,17				25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
4-tert-Butylpyrocatechol 98-29-3	2,94					

SECTION 13: Disposal considerations

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

Road transport ADR:

Not dangerous goods

Railroad transport RID:

Not dangerous goods

Inland water transport ADN:
Not dangerous goods

Marine transport IMDG:
Not dangerous goods

Air transport IATA:
Not dangerous goods

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

VOC content 0,00 %
(VOCV 814.018 VOC regulation CH)

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:

R21/22 Harmful in contact with skin and if swallowed.
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R33 Danger of cumulative effects.
R34 Causes burns.
R36/37/38 Irritating to eyes, respiratory system and skin.
R51 Toxic to aquatic organisms.
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.

H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
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.

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

MKT injection adhesive VMZ

V002.0
Revision: 19.07.2011
printing date: 13.09.2011

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

Product identifier:
MKT injection adhesive VMZ, Comp. B

Relevant identified uses of the substance or mixture and uses advised against:
Intended use:
compound mortar

Company name:
MKT Metall-Kunststoff-Technik GmbH & Co. KG
Auf dem Immel 2
D-67685 Weilerbach
Phone: +49 (0) 6374/9116-0
E-Mail: Responsible for the safety data sheet: mkt@mkt-duebel.de

SECTION 2: Hazards identification

Classification of the substance or mixture:

Classification (DPD):
Sensitizing
R43 May cause sensitisation by skin contact.

Label elements (DPD):

Xi - Irritant

Risk phrases:
R43 May cause sensitisation 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.

Contains:
Dibenzoyl peroxide

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

SECTION 3: Composition/information on ingredients

General chemical description:
Hardener
Base substances of preparation:
Dibenzoyl peroxide
Inorganic fillers

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

Hazardous components CAS-No.	EINECS REACH-Reg No.	content	Classification
Dibenzoyl peroxide 94-36-0	202-327-6	>= 10- < 20 %	Organic peroxides B H241 Serious eye irritation 2 H319 Skin sensitizer 1 H317

Only dangerous ingredients for which a CLP classification is already available are displayed in this table.
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.

Declaration of ingredients according to DPD (EC) No 1999/45:

Hazardous components CAS-No.	EINECS REACH-Reg No.	content	Classification
Dibenzoyl peroxide 94-36-0	202-327-6	>= 10 - < 20 %	E - Explosive; R3 Xi - Irritant; R36 O - Oxidizing; R7 R43

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.

SECTION 4: First aid measures

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:
Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:
Rinse the mouth. Drink 1-2 glasses of water.

Most important symptoms and effects, both acute and delayed:
SKIN: Rash, Urticaria.

Indication of any immediate medical attention and special treatment needed:
See section: Description of first aid measures

SECTION 5: Firefighting measures

Extinguishing media:
Suitable extinguishing media:
powder
Carbon dioxide.
water spray jet
Fine water spray

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

Special hazards arising from the substance or mixture:
In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO2) can be released.

Advice for firefighters:
Wear self-contained breathing apparatus.
Wear protective equipment.

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

SECTION 6: Accidental release measures

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.

Environmental precautions:
Do not empty into drains / surface water / ground water.

Methods and material for containment and cleaning up:
Remove mechanically.
Dispose of contaminated material as waste according to Chapter 13.

Reference to other sections:
See advice in chapter 8

SECTION 7: Handling and storage

Precautions for safe handling:
Avoid skin and eye contact.
Throw out sparks on burning.

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

Conditions for safe storage, including any incompatibilities:
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+).

Specific end use(s):
compound mortar

SECTION 8: Exposure controls/personal protection

Control parameters:
Valid for
Great Britain

Ingredient	ppm	mg/m³	Type	Category	Remarks
GLYCEROL, MIST 56-81-5		10	Time Weighted Average (TWA):		EH40 WEL

Exposure controls:

Respiratory protection:
Suitable breathing mask when there is inadequate ventilation.
Filter: A - P2

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.

Eye protection:
Goggles which can be tightly sealed.

Skin protection:
Suitable protective clothing

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties:

Appearance	paste paste black
Odor	characteristic
pH	No data available / Not applicable
Initial boiling point	No data available / Not applicable
Flash point	116 °C (240.8 °F); no method
Decomposition temperature	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Density	No data available / Not applicable
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (20 °C (68 °F); Solvent: Water)	Insoluble
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

Other information:

No data available / Not applicable

SECTION 10: Stability and reactivity

Reactivity:
Reaction with oxidants.

Chemical stability:
Stable under recommended storage conditions.

Possibility of hazardous reactions:
See section reactivity

Conditions to avoid:
Temperatures over appr. 80 °C

Incompatible materials:
None if used properly.

Hazardous decomposition products:
None known

SECTION 11: Toxicological information

General toxicological information:
The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. 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:
Primary eye irritation: slightly irritating, does not require labeling

Sensitizing:
May cause sensitization by skin contact.

SECTION 12: Ecological information

General ecological information:
The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. 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.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Dibenzoyl peroxide 94-36-0	LC50	2 mg/l	Fish	96 h	Poecilia reticulata	OECD Guideline 203 (Fish, Acute Toxicity Test)
Dibenzoyl peroxide 94-36-0	EC50	2,91 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Persistence and degradability:

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

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Dibenzoyl peroxide 94-36-0	3,46					

SECTION 13: Disposal considerations

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 or other dangerous substances

SECTION 14: Transport information

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

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

VOC content 0,0 %
(VOCV 814.018 VOC regulation CH)

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:

R3 Extreme risk of explosion by shock, friction, fire or other sources of ignition.
R36 Irritating to eyes.
R43 May cause sensitisation by skin contact.
R7 May cause fire.
H241 Heating may cause a fire or explosion.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

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.

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

MKT injection adhesive VMZ express

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

Product identifier:
MKT injection adhesive VMZ express, Comp. A

Relevant identified uses of the substance or mixture and uses advised against:
Intended use:
compound mortar

Company name:
MKT Metall-Kunststoff-Technik GmbH & Co. KG
Auf dem Immel 2
D-67685 Weilerbach
Phone: +49 (0) 6374/9116-0
E-Mail: Responsible for the safety data sheet: mkt@mkt.de

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

SECTION 2: Hazards identification

Classification of the substance or mixture:

Classification (DPD):
Dangerous for the environment
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Label elements (DPD):
Risk phrases:
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:
S2 Keep out of the reach of children.
S46 If swallowed, seek medical advice immediately and show this container or label.
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

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

SECTION 3: Composition/information on ingredients

General chemical description:
Resin
Base substances of preparation:
Inorganic fillers
Methacrylates

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

Hazardous components CAS-No.	EINECS REACH-Reg No.	content	Classification
Hexanediol dimethacrylate 6606-59-3	229-551-7	< 10 %	Specific target organ toxicity - single exposure 3 H335 Serious eye irritation 2 H319 Skin irritation 2 H315
N,N-Diethylaniline 91-66-7	202-088-8	< 0,5 %	Acute toxicity 3; Oral H301 Acute toxicity 3; Inhalation H331 Acute toxicity 3; Dermal H311 Specific target organ toxicity - repeated exposure 2 H373 Chronic hazards to the aquatic environment 2 H411

Only dangerous ingredients for which a CLP classification is already available are displayed in this table.
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.

Declaration of ingredients according to DPD (EC) No 1999/45:

Hazardous components CAS-No.	EINECS REACH-Reg No.	content	Classification
Hexanediol dimethacrylate 6606-59-3	229-551-7	< 10 %	Xi - Irritant; R36/37/38 N - Dangerous for the environment; R51/53
N,N-Diethylaniline 91-66-7	202-088-8	< 0,5 %	T - Toxic; R23/24/25 R33 N - Dangerous for the environment; R51/53
4-tert-Butylpyrocatechol 98-29-3	202-653-9	< 1 %	C - Corrosive; R34 Xn - Harmful; R21/22 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.

SECTION 4: First aid measures

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:
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.

Most important symptoms and effects, both acute and delayed:
No data available.

Indication of any immediate medical attention and special treatment needed:
See section: Description of first aid measures

SECTION 5: Firefighting measures

Extinguishing media:
Suitable extinguishing media:
carbon dioxide
powder
Fine water spray
water spray jet

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

Special hazards arising from the substance or mixture:
In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO2) can be released.

Advice for firefighters:
Wear self-contained breathing apparatus.
Wear protective equipment.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:
Avoid contact with eyes.
Ensure adequate ventilation.
Wear protective equipment.
Danger of slipping on spilled product.

Environmental precautions:
Do not empty into drains / surface water / ground water.

Methods and material for containment and cleaning up:
Remove mechanically.
Dispose of contaminated material as waste according to Chapter 13.

Reference to other sections:
See advice in chapter 8

SECTION 7: Handling and storage

Precautions for safe handling:
Avoid skin and eye contact.
Ensure that workrooms are adequately ventilated.

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

Conditions for safe storage, including any incompatibilities:
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.).

Specific end use(s):
compound mortar

SECTION 8: Exposure controls/personal protection

Control parameters:

Valid for
Great Britain

None

Exposure controls:

Respiratory protection:
When processing large amounts.
Suitable breathing mask when there is inadequate ventilation.
Filter: A - P2

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.

Eye protection:
Goggles which can be tightly sealed.

Skin protection:
Suitable protective clothing

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties:

Appearance	paste pasty light beige
Odor	characteristic
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 (23 °C (73.4 °F))	1,55 g/cm3
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (20 °C (68 °F); Solvent: Water)	practically insoluble
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

Other information:

No data available / Not applicable

SECTION 10: Stability and reactivity

Reactivity:
Reaction with oxidants.
Reaction with strong acids.

Chemical stability:
Stable under recommended storage conditions.

Possibility of hazardous reactions:
See section reactivity

Conditions to avoid:
None if used for intended purpose.

Incompatible materials:
None if used properly.

Hazardous decomposition products:
None known

SECTION 11: Toxicological information

General toxicological information:
The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. 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.

SECTION 12: Ecological information

General ecological information:
The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. 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.
Harmful to aquatic organisms.
May cause long-term adverse effects in the aquatic environment.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
N,N-Diethylaniline 91-66-7	LC50	16,4 mg/l	Fish	96 h	Pimephales promelas	EPA OPP 72-1 (Fish Acute Toxicity Test)
N,N-Diethylaniline 91-66-7	EC50	1 - 1,6 mg/l	Daphnia	48 h	Daphnia magna	EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids)
N,N-Diethylaniline 91-66-7	EC50	5,6 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	
4-tert-Butylpyrocatechol 98-29-3	EC50	1,4 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
N,N-Diethylaniline 91-66-7		aerobic	> 90 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
N,N-Diethylaniline 91-66-7		17 - 125	56 d	Cyprinus carpio		
N,N-Diethylaniline 91-66-7	3,17				25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
4-tert-Butylpyrocatechol 98-29-3	2,94					

SECTION 13: Disposal considerations

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

Road transport ADR:
Not dangerous goods

Railroad transport RID:
Not dangerous goods

Inland water transport ADN:
Not dangerous goods

Marine transport IMDG:
Not dangerous goods

Air transport IATA:
Not dangerous goods

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

VOC content 0,00 %
(VOCV 814.018 VOC regulation CH)

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:

R21/22 Harmful in contact with skin and if swallowed.
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R33 Danger of cumulative effects.
R34 Causes burns.
R36/37/38 Irritating to eyes, respiratory system and skin.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
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.

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

MKT injection adhesive VMZ express

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

Product identifier:
MKT injection adhesive VMZ express, Comp. B

Relevant identified uses of the substance or mixture and uses advised against:
Intended use:
compound mortar

Company name:
MKT Metall-Kunststoff-Technik GmbH & Co. KG
Auf dem Immel 2
D-67685 Weilerbach
Phone: +49 (0) 6374/9116-0
E-Mail: Responsible for the safety data sheet: mkt@mkt.de

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

SECTION 2: Hazards identification

Classification of the substance or mixture:

Classification (DPD):
Sensitizing
R43 May cause sensitisation by skin contact.

Label elements (DPD):

Xi - Irritant

Risk phrases:
R43 May cause sensitisation 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.

Contains:
Dibenzoyl peroxide

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

SECTION 3: Composition/information on ingredients

General chemical description:
Hardener
Base substances of preparation:
Dibenzoyl peroxide
Inorganic fillers

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

Hazardous components CAS-No.	EINECS REACH-Reg No.	content	Classification
Dibenzoyl peroxide 94-36-0	202-327-6	>= 10- < 20 %	Organic peroxides B H241 Serious eye irritation 2 H319 Skin sensitizer 1 H317

Only dangerous ingredients for which a CLP classification is already available are displayed in this table.
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.

Declaration of ingredients according to DPD (EC) No 1999/45:

Hazardous components CAS-No.	EINECS REACH-Reg No.	content	Classification
Dibenzoyl peroxide 94-36-0	202-327-6	> 10 - < 20 %	E - Explosive; R3 Xi - Irritant; R36 O - Oxidizing; R7 R43
2-ethylhexyl benzoate 5444-75-7	226-641-8	< 5 %	R53
Oxydipropyl dibenzoate 27138-31-4	248-258-5	< 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.

SECTION 4: First aid measures

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:
Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:
Rinse the mouth. Drink 1-2 glasses of water.

Most important symptoms and effects, both acute and delayed:
SKIN: Rash, Urticaria.

Indication of any immediate medical attention and special treatment needed:
See section: Description of first aid measures

SECTION 5: Firefighting measures

Extinguishing media:
Suitable extinguishing media:
powder
Carbon dioxide.
water spray jet
Fine water spray

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

Special hazards arising from the substance or mixture:
In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO2) can be released.

Advice for firefighters:
Wear self-contained breathing apparatus.
Wear protective equipment.

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

SECTION 6: Accidental release measures

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.

Environmental precautions:
Do not empty into drains / surface water / ground water.

Methods and material for containment and cleaning up:
Remove mechanically.
Dispose of contaminated material as waste according to Chapter 13.

Reference to other sections:
See advice in chapter 8

SECTION 7: Handling and storage

Precautions for safe handling:
Avoid skin and eye contact.
Throw out sparks on burning.

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

Conditions for safe storage, including any incompatibilities:
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+).

Specific end use(s):
compound mortar

SECTION 8: Exposure controls/personal protection

Control parameters:
Valid for
Great Britain

Ingredient	ppm	mg/m³	Type	Category	Remarks
GLYCEROL, MIST 56-81-5		10	Time Weighted Average (TWA):		EH40 WEL

Exposure controls:

Respiratory protection:
Suitable breathing mask when there is inadequate ventilation.
Filter: A - P2

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.

Eye protection:
Goggles which can be tightly sealed.

Skin protection:
Suitable protective clothing

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties:

Appearance	paste paste black
Odor	characteristic
pH	No data available / Not applicable
Initial boiling point	No data available / Not applicable
Flash point	116 °C (240.8 °F); no method
Decomposition temperature	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Density	No data available / Not applicable
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (20 °C (68 °F); Solvent: Water)	Insoluble
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

Other information:

No data available / Not applicable

SECTION 10: Stability and reactivity

Reactivity:
Reaction with oxidants.

Chemical stability:
Stable under recommended storage conditions.

Possibility of hazardous reactions:
See section reactivity

Conditions to avoid:
Temperatures over appr. 80 °C

Incompatible materials:
None if used properly.

Hazardous decomposition products:
None known

SECTION 11: Toxicological information

General toxicological information:
The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. 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:
Primary eye irritation: slightly irritating, does not require labeling

Sensitizing:
May cause sensitization by skin contact.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Oxydipropyl dibenzoate 27138-31-4	LD50 LC50 LD50	3.914 mg/kg > 200 mg/l > 2.000 mg/kg	oral inhalation dermal	 4 h 	rat rat rat	OECD Guideline 401 (Acute Oral Toxicity) OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Oxydipropyl dibenzoate 27138-31-4	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Oxydipropyl dibenzoate 27138-31-4	slightly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Oxydipropyl dibenzoate 27138-31-4	not sensitising		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
Oxydipropyl dibenzoate 27138-31-4	negative negative negative	in vitro mammalian chromosome aberration test bacterial reverse mutation assay (e.g Ames test) mammalian cell gene mutation assay	with and without with and without with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Oxydipropyl dibenzoate 27138-31-4	NOAEL=> 1000 mg/kg	oral: feed	90 days daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

SECTION 12: Ecological information

General ecological information:

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. 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.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Dibenzoyl peroxide 94-36-0	LC50	2 mg/l	Fish	96 h	Poecilia reticulata	OECD Guideline 203 (Fish, Acute Toxicity Test)
Dibenzoyl peroxide 94-36-0	EC50	2,91 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Oxydipropyl dibenzoate 27138-31-4	LC50	3,7 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Oxydipropyl dibenzoate 27138-31-4	EC50	19,3 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Oxydipropyl dibenzoate 27138-31-4	EC50	15 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method

Dibenzoyl peroxide 94-36-0	readily biodegradable		> 60 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Oxydipropyl dibenzoate 27138-31-4	readily biodegradable	aerobic	87 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Dibenzoyl peroxide 94-36-0	3,46					
2-ethylhexyl benzoate 5444-75-7	5,19					
Oxydipropyl dibenzoate 27138-31-4	3,9					OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)

SECTION 13: Disposal considerations

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 or other dangerous substances

SECTION 14: Transport information

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

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture:
VOC content 0,0 %
(VOCV 814.018 VOC regulation
CH)

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:

R3 Extreme risk of explosion by shock, friction, fire or other sources of ignition.
R36 Irritating to eyes.
R43 May cause sensitisation 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.
H241 Heating may cause a fire or explosion.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

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.