

K-A-L-M Befestigungssysteme GmbH
67661 Kaiserslautern

Date printed 14.05.2020, Revision 31.08.2018

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

1.1 Product identifier

VPK-SF

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

1.2.1 Relevant uses

Adhesive

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company K-A-L-M Befestigungssysteme GmbH
Marie-Curie-Straße 5
67661 Kaiserslautern / GERMANY
Phone +49(0)6301 - 320 10 -0
Fax +49(0)6301 - 320 10 -24
Homepage www.kalm.de
E-mail info@kalm.de

Address enquiries to

Technical information info@kalm.de
Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Company +49 6301 32010-0 Mo-Fr 8:00 - 16:00

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Skin Sens. 1: H317 May cause an allergic skin reaction.
Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

Hazard pictograms



Signal word

WARNING

Contains:

Ethylene dimethacrylate
Methacrylic acid, monoester with Propan-1,2-diole

Hazard statements

H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.
P103 Read carefully and follow all instructions.
P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves.
P302+P352 IF ON SKIN: Wash with plenty of water / soap.
P501 Dispose of contents/container in accordance with local/national regulation.

2.3 Other hazards

Human health dangers

People who are allergic to peroxide should avoid the use of the product.
May cause irritation of eye and skin.

Environmental hazards

Does not contain any PBT or vPvB substances.

Other hazards

Further hazards were not determined with the current level of knowledge.

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SECTION 3: Composition / Information on ingredients

Product-type:

3.2 The product is a mixture.

Range [%]	Substance
1 - < 10	Ethylene dimethacrylate CAS: 97-90-5, EINECS/ELINCS: 202-617-2, EU-INDEX: 607-114-00-5 GHS/CLP: STOT SE 3: H335 - Skin Sens. 1: H317
1 - < 10	Methacrylic acid, monoester with Propan-1,2-diole CAS: 27813-02-1, EINECS/ELINCS: 248-666-3 GHS/CLP: Eye Irrit. 2: H319 - Skin Sens. 1: H317
< 1	Dibenzoyl peroxide CAS: 94-36-0, EINECS/ELINCS: 202-327-6, EU-INDEX: 617-008-00-0, Reg-No.: 01-2119511472-50-XXXX GHS/CLP: Org. Perox. B: H241 - Skin Sens. 1: H317 - Eye Irrit. 2: H319 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410, M_acute = 10, M_chronic = 10

Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information	Change soaked clothing.
Inhalation	Ensure supply of fresh air.
Skin contact	When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Rinse out mouth and give plenty of water to drink. Do not induce vomiting. Consult a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Allergic reactions

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
Forward this sheet to the doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	foam, dry powder, water spray jet, carbon dioxide
Extinguishing media that must not be used	Full water jet

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products, carbon monoxide (CO), not combusted hydrocarbons

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.
Collect contaminated firefighting water separately, must not be discharged into the drains.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment (protective gloves).
Ensure adequate ventilation.
High risk of slipping due to leakage/spillage of product.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.
In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, universal absorbent, diatomaceous earth).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with eyes and skin.
The product is combustible.
Do not eat, drink or smoke when using this product.
Wash hands before breaks and after work.
Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Provide solvent-resistant and impermeable floor.
Do not store together with food and animal food/diet.
Keep in a cool place. Store in a dry place.
Protect from heat/overheating and from sun.
Recommended storage temperature: 5-25 °C (41-77 °F).

7.3 Specific end use(s)

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SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance
Dibenzoyl peroxide
CAS: 94-36-0, EINECS/ELINCS: 202-327-6, EU-INDEX: 617-008-00-0, Reg.No.: 01-2119511472-50-XXXX
Long-term exposure: 5 mg/m ³
Amorphus Silica
CAS: 112945-52-5, EINECS/ELINCS: 231-545-4
Long-term exposure: 6 mg/m ³ , total inhalable dust

DNEL

Substance
Dibenzoyl peroxide, CAS: 94-36-0
Industrial, dermal, Long-term - systemic effects: 6,6 mg/kg bw/d.
Industrial, inhalative, Long-term - systemic effects: 11,75 mg/m ³ .
general population, oral, Long-term - systemic effects: 1,65 mg/kg bw/d.
general population, dermal, Long-term - systemic effects: 3,3 mg/kg bw/d.
general population, inhalative, Long-term - systemic effects: 2,9 mg/m ³ .

PNEC

Substance
Dibenzoyl peroxide, CAS: 94-36-0
oral (food), 6,67 mg/kg dw.
soil, 0,0758 mg/kg dw.
sediment (freshwater), 0,338 mg/kg dw.
sewage treatment plants (STP), 0,35 mg/l.
freshwater, 0,000602 mg/l.
seawater, 0,0000602 mg/l.

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	0,7 mm; Butyl rubber, >480 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
Skin protection	Protective clothing (EN 340)
Other	Avoid contact with eyes and skin. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	Respiratory protection mask in the event of high concentrations. Short term: filter apparatus, combination filter A-P1. (DIN EN 14387)
Thermal hazards	No information available.
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	suspension
Color	yellowish
Odor	characteristic
Odour threshold	not determined
pH-value	not determined
pH-value [1%]	not determined
Boiling point [°C]	240
Flash point [°C]	110
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	not determined
Upper explosion limit	not determined
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	0,01
Density [g/ml]	1,1 - 1,2 (20 °C / 68,0 °F)
Bulk density [kg/m ³]	not applicable
Solubility in water	insoluble
Partition coefficient [n-octanol/water]	not determined
Viscosity	not determined
Relative vapour density determined in air	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Autoignition temperature [°C]	not determined
Decomposition temperature [°C]	55

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

See SECTION 10.3.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

Strong oxidizing agent.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Substance
Methacrylic acid, monoester with Propan-1,2-diole, CAS: 27813-02-1
LD50, oral, Rat: 11200 mg/kg (IUCLID).
LD50, oral, Rat: >5000 mg/kg bw (lit.).
Ethylene dimethacrylate, CAS: 97-90-5
LD50, dermal, Rat: > 2000 mg/kg.
LD50, oral, Rat: 8700 mg/kg.
Dibenzoyl peroxide, CAS: 94-36-0
LD50, oral, Rat: 5700 mg/kg.

Serious eye damage/irritation	Based on the available information, the classification criteria are not fulfilled.
Skin corrosion/irritation	Based on the available information, the classification criteria are not fulfilled.
Respiratory or skin sensitisation	May cause an allergic skin reaction. Based on the available information, the classification criteria are fulfilled. Calculation method
Specific target organ toxicity — single exposure	Based on the available information, the classification criteria are not fulfilled.
Specific target organ toxicity — repeated exposure	Based on the available information, the classification criteria are not fulfilled.
Mutagenicity	Based on the available information, the classification criteria are not fulfilled.
Reproduction toxicity	Based on the available information, the classification criteria are not fulfilled.
Carcinogenicity	Based on the available information, the classification criteria are not fulfilled.
Aspiration hazard	Based on the available information, the classification criteria are not fulfilled.
General remarks	

Toxicological data of complete product are not available.

SECTION 12: Ecological information

12.1 Toxicity

Substance
Methacrylic acid, monoester with Propan-1,2-diole, CAS: 27813-02-1
LC50, (48h), Leuciscus idus: 493 mg/l (IUCLID).
LC50, (96h), fish: >100 mg/L (IMCD).
EC0, Bacteria: >100 mg/L (IMCD).
Ethylene dimethacrylate, CAS: 97-90-5
LC50, (96h), Danio rerio: 15,95 mg/l (OECD 203).
EC50, (3h), Pseudomonas putida: 570 mg/l (OECD 209).
Dibenzoyl peroxide, CAS: 94-36-0
LC50, (96h), Oncorhynchus mykiss: 0,0602 mg/l (OECD 203).
LC50, (96h), fish: 1,7-2,4 mg/l (OECD 203).
EC50, (48h), Daphnia magna: 2,91 mg/l (OECD 202).
EC50, (48h), Daphnia magna: 0,11 mg/l (OECD 202).
EC50, (72h), Pseudokirchneriella subcapitata: 0,0711 mg/l (OECD 201).
NOEC, (48h), Daphnia magna: 1,99 mg/l.

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12.2 Persistence and degradability

Behaviour in environment compartments	No information available.
Behaviour in sewage plant	AOX-advice: No dangerous components.
Biological degradability	No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

Spillages may penetrate the soil causing ground water contamination.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

Do not discharge product unmonitored into the environment or into the drainage.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.
Coordinate disposal with the disposal contractor/authorities if necessary.

Waste no. (recommended) 080409*

Contaminated packaging

Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150110*
150102

SECTION 14: Transport information

14.1 UN number

Transport by land according to ADR/RID 3082

Inland navigation (ADN) 3082

Marine transport in accordance with IMDG 3082

Air transport in accordance with IATA 3082

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14.2 UN proper shipping name

Transport by land according to ADR/RID Environmentally hazardous substance, liquid, n.o.s. (Dibenzoyl peroxide)

- Classification Code

M6

- Label



- ADR LQ

5 I

- ADR 1.1.3.6 (8.6)

Transport category (tunnel restriction code) 3 (-)

Inland navigation (ADN)

Environmentally hazardous substance, liquid, n.o.s. (Dibenzoyl peroxide)

- Classification Code

M6

- Label



Marine transport in accordance with IMDG

Environmentally hazardous substance, liquid, n.o.s. (Dibenzoyl peroxide)

- EMS

F-A, S-F

- Label



- IMDG LQ

5 I

Air transport in accordance with IATA

Environmentally hazardous substance, liquid, n.o.s. (Dibenzoyl peroxide)

- Label



14.3 Transport hazard class(es)

Transport by land according to ADR/RID 9

Inland navigation (ADN) 9

Marine transport in accordance with IMDG 9

Air transport in accordance with IATA 9

14.4 Packing group

Transport by land according to ADR/RID III

Inland navigation (ADN) III

Marine transport in accordance with IMDG III

Air transport in accordance with IATA III

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14.5 Environmental hazards

Transport by land according to ADR/RID yes

Inland navigation (ADN) yes

Marine transport in accordance with IMDG MARINE POLLUTANT

Air transport in accordance with IATA yes

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC; 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2020)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011).
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	not applicable

15.2 Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Hazard statements (SECTION 03)

H410 Very toxic to aquatic life with long lasting effects.
H400 Very toxic to aquatic life.
H241 Heating may cause a fire or explosion.
H335 May cause respiratory irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
 RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
 ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
 ATE = acute toxicity estimate
 CAS = Chemical Abstracts Service
 CLP = Classification, Labelling and Packaging
 DMEL = Derived Minimum Effect Level
 DNEL = Derived No Effect Level
 EC50 = Median effective concentration
 ECB = European Chemicals Bureau
 EEC = European Economic Community
 EINECS = European Inventory of Existing Commercial Chemical Substances
 EL50 = Median effective loading
 ELINCS = European List of Notified Chemical Substances
 EmS = Emergency Schedules
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
 IC50 = Inhibition concentration, 50%
 IMDG = International Maritime Code for Dangerous Goods
 IUCLID = International Uniform Chemical Information Database
 LC50 = Lethal concentration, 50%
 LD50 = Median lethal dose
 LC0 = lethal concentration, 0%
 LOAEL = lowest-observed-adverse-effect level
 LL50 = Median lethal loading
 LQ = Limited Quantities
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships
 NOAEL = No Observed Adverse Effect Level
 NOEC = No Observed Effect Concentration
 PBT = Persistent, Bioaccumulative and Toxic substance
 PNEC = Predicted No-Effect Concentration
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
 STP = Sewage Treatment Plant
 TLV@TWA = Threshold limit value – time-weighted average
 TLV@STEL = Threshold limit value – short-time exposure limit
 VOC = Volatile Organic Compounds
 vPvB = very Persistent and very Bioaccumulative

16.3 Other information**Classification procedure**

Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)
 Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects. (Calculation method)

Modified position

none



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