

PANTERA Product GmbH
28197 Bremen / GERMANY

Date printed 22.12.2020, Revision 24.07.2019

Version 02. Supersedes version: 01

Page 1 / 11

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

1.1 Product identifier

2K MS-3000/60v3, Comp. A

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 PANTERA Product GmbH
Simon-Bolivar-Straße 29
28197 Bremen / GERMANY
Phone +49 (0)421 520 80 780
Fax +49 (0)421 520 80 789
Homepage www.panteraproduct.de
E-mail info@panteraproduct.de

Address enquiries to

Technical information info@panteraproduct.de

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body GIZ-Nord; +49 (0)551 19 240

Company

SECTION 2: Hazards identification

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

No classification.

2.2 Label elements

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

Hazard pictograms none

Signal word none

Hazard statements none

Precautionary statements none

Special labelling EUH210 Safety data sheet available on request.

Contains: N-[3-(Trimethoxysilyl)propyl]ethylenediamine. EUH208 May produce an allergic reaction.

2.3 Other hazards

Environmental hazards Does not contain any PBT or vPvB substances.

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

PANTERA Product GmbH
28197 Bremen / GERMANY

Date printed 22.12.2020, Revision 24.07.2019

Version 02. Supersedes version: 01

Page 2 / 11

SECTION 3: Composition / Information on ingredients

Product-type:

3.2 The product is a mixture.

Range [%]	Substance
1 - <2,5	Trimethoxyvinylsilane CAS: 2768-02-7, EINECS/ELINCS: 220-449-8, Reg-No.: 01-2119513215-52-XXXX GHS/CLP: Flam. Liq. 3: H226 - Acute Tox. 4: H332
0,1 - <1	N-[3-(Trimethoxysilyl)propyl]ethylenediamine CAS: 1760-24-3, EINECS/ELINCS: 217-164-6, Reg-No.: 01-2119970215-39-XXXX GHS/CLP: Eye Dam. 1: H318 - Acute Tox. 4: H332 - Skin Sens. 1B: H317 - Aquatic Chronic 2: H411

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

Take off contaminated clothing and wash before reuse.

Inhalation

Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

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

Seek medical advice immediately.
Rinse out mouth and give plenty of water to drink.

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.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Foam.
Carbon dioxide.
Water spray jet.
Dry powder.

Extinguishing media that must not be used

Full water jet.

5.2 Special hazards arising from the substance or mixture

In the event of fire the following can be released:
Carbon monoxide (CO)
Nitrogen oxides (NOx).

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

PANTERA Product GmbH
28197 Bremen / GERMANY

Date printed 22.12.2020, Revision 24.07.2019

Version 02. Supersedes version: 01

Page 3 / 11

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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.

6.3 Methods and material for containment and cleaning up

Take up mechanically.
Take up residues with absorbent material (e.g. sand, sawdust, general purpose binder, diatomaceous earth).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.

Wash hands before breaks and after work.
Use barrier skin cream.
Do not eat, drink, smoke or take drugs at work.
Take off contaminated clothing and wash before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Prevent penetration into the ground.
Do not store together with food and animal food/diet.
Keep container in a well-ventilated place.
Keep in a cool place. Store in a dry place.
Protect from heat/overheating.

7.3 Specific end use(s)

See product use, SECTION 1.2

PANTERA Product GmbH
28197 Bremen / GERMANY

Date printed 22.12.2020, Revision 24.07.2019

Version 02. Supersedes version: 01

Page 4 / 11

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

not applicable

DNEL

Substance
Trimethoxyvinylsilane, CAS: 2768-02-7
Industrial, inhalative, Acute - systemic effects: 260 mg/m ³ .
Industrial, dermal, Long-term - systemic effects: 3.9 mg/kg bw/day.
Industrial, inhalative, Long-term - systemic effects: 27.6 mg/m ³ .
general population, oral, Long-term - systemic effects: 300 µg/kg bw/day.
general population, inhalative, Acute - systemic effects: 50 mg/m ³ .
general population, inhalative, Long-term - systemic effects: 6.7 mg/m ³ .
general population, dermal, Long-term - systemic effects: 7.8 mg/kg bw/day.
N-[3-(Trimethoxysilyl)propyl]ethylenediamine, CAS: 1760-24-3
Industrial, inhalative, Acute - systemic effects: 260 mg/m ³ .
Industrial, inhalative, Acute - local effects: 5.36 mg/m ³ .
Industrial, inhalative, Long-term - local effects: 600 µg/m ³ .
Industrial, inhalative, Long-term - systemic effects: 260 mg/m ³ .
general population, oral, Long-term - systemic effects: 8 mg/kg bw/day.
general population, inhalative, Acute - systemic effects: 50 mg/m ³ .
general population, inhalative, Long-term - systemic effects: 50 mg/m ³ .
general population, inhalative, Long-term - local effects: 100 µg/m ³ .
general population, inhalative, Acute - local effects: 4 mg/m ³ .

PNEC

Substance
Trimethoxyvinylsilane, CAS: 2768-02-7
sediment (seawater), 150 µg/kg.
sediment (freshwater), 1.5 mg/kg.
sewage treatment plants (STP), 6.6 mg/L.
seawater, 40 µg/L.
freshwater, 400 µg/L.
N-[3-(Trimethoxysilyl)propyl]ethylenediamine, CAS: 1760-24-3
sediment (seawater), 22 µg/kg.
sediment (freshwater), 220 µg/kg.
sewage treatment plants (STP), 25 mg/l.
seawater, 0,0062 mg/l.
freshwater, 0,062 mg/l.

PANTERA Product GmbH
28197 Bremen / GERMANY

Date printed 22.12.2020, Revision 24.07.2019

Version 02. Supersedes version: 01

Page 5 / 11

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	0,4 mm Butyl rubber, >120 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
Skin protection	light protective clothing
Other	Avoid contact with eyes and skin. Do not inhale vapours.
Respiratory protection	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, filter A. (DIN EN 14387)
Thermal hazards	no
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	pasty
Color	various
Odor	characteristic
Odour threshold	not determined
pH-value	not applicable
pH-value [1%]	not determined
Boiling point [°C]	not applicable
Flash point [°C]	not applicable
Flammability (solid, gas) [°C]	not determined
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not determined
Density [g/ml]	1,4 (20 °C / 68,0 °F)
Bulk density [kg/m³]	not applicable
Solubility in water	virtually insoluble
Partition coefficient [n-octanol/water]	not determined
Viscosity	not applicable
Relative vapour density determined in air	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Autoignition temperature [°C]	not applicable
Decomposition temperature [°C]	not determined

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

See SECTION 10.3.

PANTERA Product GmbH
28197 Bremen / GERMANY

Date printed 22.12.2020, Revision 24.07.2019

Version 02. Supersedes version: 01

Page 6 / 11

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents.

10.4 Conditions to avoid

See SECTION 7

10.5 Incompatible materials

Oxidizing agent

10.6 Hazardous decomposition products

No hazardous decomposition products known.

PANTERA Product GmbH
28197 Bremen / GERMANY

Date printed 22.12.2020, Revision 24.07.2019

Version 02. Supersedes version: 01

Page 7 / 11

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product
dermal, Based on the available information, the classification criteria are not fulfilled.:
oral, Based on the available information, the classification criteria are not fulfilled.:
ATE-mix, inhalation (vapour), > 20 mg/l (4 h).
Substance
Trimethoxyvinylsilane, CAS: 2768-02-7
LD50, dermal, Rabbit: 3259 mg/kg bw.
LD50, inhalative, Rat: 16,8 mg/l (4 h) (OECD TG 403).
LD50, oral, Rat: 7120 mg/kg (OECD TG 401).
NOAEL, inhalative, Rat: 0,058 mg/l (98 d).
NOAEL, oral, Rat: < 62,5 mg/kg (28 d) (OECD TG 422).
N-[3-(Trimethoxysilyl)propyl]ethylenediamine, CAS: 1760-24-3
LD50, oral, Rat: 2295 mg/kg bw (Lit.).
LD50, dermal, Rat: >2000 mg/kg bw (Lit.).
LC50, inhalative, Rat: 1,49 - 2,44 mg/L (4h) (Lit.).

Serious eye damage/irritation	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met. May cause an allergic skin reaction.
Specific target organ toxicity — single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity — repeated exposure	Based on available data, the classification criteria are not met.
Mutagenicity	Does not contain a relevant substance that meets the classification criteria.
Reproduction toxicity	Does not contain a relevant substance that meets the classification criteria.
Carcinogenicity	Does not contain a relevant substance that meets the classification criteria.
Aspiration hazard	Based on available data, the classification criteria are not met.
General remarks	Toxicological data of complete product are not available. The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

PANTERA Product GmbH
28197 Bremen / GERMANY

Date printed 22.12.2020, Revision 24.07.2019

Version 02. Supersedes version: 01

Page 8 / 11

SECTION 12: Ecological information

12.1 Toxicity

Substance
Trimethoxyvinylsilane, CAS: 2768-02-7
LC50, (96h), Oncorhynchus mykiss: 191 mg/l.
EC50, Pseudokirchneriella subcapitata: 210 mg/l (7 d) (US-EPA).
EC50, (48h), Daphnia magna: 168,7 mg/l (92/69/EWG C.2).
EC10, Pseudomonas putida: 1000 mg/l (5 h).
N-[3-(Trimethoxysilyl)propyl]ethylenediamine, CAS: 1760-24-3
LC50, (96h), Danio rerio: 597 mg/l (Lit.).
EC50, (16h), Pseudomonas putida: 67 mg/l (Lit.).
EC50, (48h), Daphnia magna: 81 mg/l (Lit.).
IC50, (72h), Algae: 8,8 mg/l (OECD 201).
NOEC, (21d), Daphnia magna: > 1 mg/l (Lit.).
NOEC, (72h), Algae: 3,1 mg/l (OECD 201).

12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	The product is not readily biodegradable.

12.3 Bioaccumulative potential

not determined

12.4 Mobility in soil

not applicable

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

Ecological data of complete product are not available.
The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material c 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

For recycling, consult manufacturer.
Disposal in an incineration plant in accordance with the regulations of the local authorities.

Waste no. (recommended)

080410

Contaminated packaging

Untaminated packaging may be taken for recycling.

Waste no. (recommended)

150101
150102

PANTERA Product GmbH
28197 Bremen / GERMANY

Date printed 22.12.2020, Revision 24.07.2019

Version 02. Supersedes version: 01

Page 9 / 11

SECTION 14: Transport information

14.1 UN number

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

14.2 UN proper shipping name

Transport by land according to ADR/RID NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

14.4 Packing group

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

PANTERA Product GmbH
28197 Bremen / GERMANY

Date printed 22.12.2020, Revision 24.07.2019

Version 02. Supersedes version: 01

Page 10 / 11

14.5 Environmental hazards

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

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 1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2016/2037/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014

TRANSPORT-REGULATIONS ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2019)

NATIONAL REGULATIONS (GB): EH40/2005 Workplace exposure limits (Second edition, published December 2011).

- Observe employment restrictions for people no

- VOC (2010/75/CE) 0 %

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 03)

H411 Toxic to aquatic life with long lasting effects.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H226 Flammable liquid and vapour.

PANTERA Product GmbH
28197 Bremen / GERMANY

Date printed 22.12.2020, Revision 24.07.2019

Version 02. Supersedes version: 01

Page 11 / 11

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
ELINCS = European List of Notified Chemical Substances
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
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

Modified position

SECTION 2 been added: Further hazards were not determined with the current level of knowledge.

SECTION 8 been added: In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.

SECTION 8 deleted: If ventilation is insufficient, wear respiratory protection.

Copyright: Chemiebüro®