

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.09.2023

Version number 2 (replaces version 1)

Revision: 19.09.2023

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

1.1 Product identifier

Trade name 2K BODENBESCHICHTUNG KOMP B**Article number:** 7760

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

Technical function Plating agent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Remmers GmbH
Bernhard-Remmers-Str. 13
D-49624 Lönigen / Germany
Tel.: +49(0)5432/83-0
Fax: +49(0)5432/3985

Remmers (UK) Limited
Unit 4 , Lloyds Court
Manor Royal, Crawley – West Sussex RH10 9QU
fon +44 (0) 1293 594 010
fax +44 (0) 1293 594 037

Information department:

Product Safety department: Phone: +44 (0) 1293 594 010
Email: sales@remmers.co.ukk

1.4 Emergency telephone number:

National Poisons Information Service (NPIS):
In England and Wales: NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

24h-Transport Emergency Contact Phone Number:
within USA and Canada: 1-800-424-9300
outside USA and Canada: 001-703-527-3887

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
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

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

Hazard pictograms

GHS07 GHS09

Signal word Warning**Hazard-determining components of labelling:**

bisphenol F-(epichlorhydrin); epoxy resin(number average molecular weight<700)
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)
1,6-Bis(2,3-epoxypropoxy)hexan

Hazard statements

H315 Causes skin irritation.

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H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P312 Call a POISON CENTER/doctor if you feel unwell.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

Additional information:

EUH205 Contains epoxy constituents. May produce an allergic reaction.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Modified epoxide resin

| Dangerous components [% w/w]: | | |
|---|--|----------|
| CAS: 28064-14-4 NLP: 500-006-8 Reg.nr.: 01-2119454392-40-XXXX | bisphenol F-(epichlorhydrin); epoxy resin(number average molecular weight<700) Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1, H317 | ≥40-<50% |
| CAS: 25068-38-6 NLP: 500-033-5 Index number: 603-074-00-8 Reg.nr.: 01-2119456619-26-XXXX | reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317, EUH205 Specific concentration limits: Skin Irrit. 2; H315: C ≥ 5 % Eye Irrit. 2; H319: C ≥ 5 % | ≥30-<40% |
| CAS: 933999-84-9 EC number: 618-939-5 Reg.nr.: 01-2119463471-41-XXXX | Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412 | ≥10-<20% |
| CAS: 111-76-2 EINECS: 203-905-0 Index number: 603-014-00-0 | 2-butoxyethanol Acute Tox. 3, H331; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319 ATE: LD50 oral: 1,200 mg/kg LC50/4 h inhalative: 3 mg/l | ≥10-<20% |

Additional information For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

If symptoms occur or in case of doubt, seek medical attention. In case of unconsciousness, do not administer anything orally.

After inhalation

Take affected persons into the open air and position comfortably

Supply fresh air and call for doctor for safety reasons.

In case of unconsciousness bring patient into stable side position for transport.

After skin contact Wash immediately with water and soap and rinse thoroughly.

After eye contact

Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

After swallowing Seek immediate medical advice.

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4.2 Most important symptoms and effects, both acute and delayed

Irritating effect on skin and eyes.

4.3 Indication of any immediate medical attention and special treatment needed

symptomatic treatment

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents

Foam

Water spray jet

Water mist

Dry extinguishing agents, carbon dioxide, sand or earth should only be used for small fires.

Use fire fighting measures that suit the environment.

5.2 Special hazards arising from the substance or mixture

May be released in case of fire

Carbon monoxide (CO)

Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:

Hydrogen chloride (HCl)

5.3 Advice for firefighters

Protective equipment:

Wear self-contained breathing apparatus.

Wear full protective suit.

Additional information

Cool endangered containers with water spray jet.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Collect contaminated fire fighting water separately. It must not enter drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

6.2 Environmental precautions:

Do not allow to enter the ground/soil.

Do not allow product to reach sewage system or water bodies.

Inform responsible authorities in case product reaches bodies of water or sewage system.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling Use only in well ventilated areas.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and containers: Store only in the original container.

Information on storage in a common storage facility: Store away from food.

Further information about storage conditions:

Store container in a well ventilated position.

Protect from frost.

Keep container tightly closed.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with limit values that require monitoring at the workplace:

CAS: 111-76-2 2-butoxyethanol

| | |
|-----|--|
| WEL | Short-term value: 246 mg/m ³ , 50 ppm |
| | Long-term value: 123 mg/m ³ , 25 ppm |
| | Sk, BMGV |

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| | |
|--|---|
| Ingredients with biological limit values: | |
| CAS: 111-76-2 2-butoxyethanol | |
| BMGV | 240 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: butoxyacetic acid |

Additional information: The lists that were valid during compilation were used as a basis.

8.2 Exposure controls

Appropriate engineering controls Use only in well-ventilated areas.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures

Do not eat, drink or smoke while working.

Use skin protection cream for preventive skin protection.

Keep away from food, beverages and animal feed.

Immediately remove soiled, saturated clothing.

Wash hands before pauses and after work.

Avoid contact with eyes and skin.

The following indication regarding the personal protective equipment are to be considered as suggestions. The selection of the necessary personal protective equipment is to be evaluated by the employer depending on the types of operations and the local circumstances. If a risk assessment on-site shows that there is no risk for employees, the personal protective equipment is not required or the amount of the PPE can be adapted accordingly.

Respiratory equipment: Not necessary if room is well-ventilated.

Hand protection

Impervious gloves

Long cuffed gloves

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Butyl rubber, BR

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection

Face protection

Tightly sealed safety glasses.

Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state

Fluid

Colour:

Yellowish

Odour:

Aromatic

Odour threshold:

Not determined.

Melting point/freezing point:

Not determined

Boiling point or initial boiling point and boiling range

>105 °C

Flammability

Not applicable.

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| | |
|--|----------------------------------|
| Lower and upper explosion limit | |
| Lower: | Not determined. |
| Upper: | Not determined. |
| Flash point: | 84 °C |
| Ignition temperature: | not applicable |
| Decomposition temperature: | Not determined. |
| pH | Not determined. |
| Viscosity: | |
| Kinematic viscosity | Not determined. |
| dynamic at 20 °C: | 200 mPas |
| Solubility | |
| Water: | Not miscible or difficult to mix |
| Partition coefficient n-octanol/water (log value) | pure epoxide resin |
| Vapour pressure: | Not determined. |
| Density and/or relative density | |
| Density at 20 °C: | 1.11 g/cm ³ |
| Relative density | Not determined. |
| Vapour density | Not determined. |
| 9.2 Other information | |
| Appearance: | |
| Form: | Fluid |
| Important information on protection of health and environment, and on safety. | |
| Explosive properties: | Product is not explosive. |
| Solvent separation test | < 3 % |
| Organic solvents: | 10.5 % |
| VOC EU | 116.6 g/l |
| Change in condition | |
| Evaporation rate | Not determined. |
| Information with regard to physical hazard classes | |
| Explosives | Void |
| Flammable gases | Void |
| Aerosols | Void |
| Oxidising gases | Void |
| Gases under pressure | Void |
| Flammable liquids | Void |
| Flammable solids | Void |
| Self-reactive substances and mixtures | Void |
| Pyrophoric liquids | Void |
| Pyrophoric solids | Void |
| Self-heating substances and mixtures | Void |
| Substances and mixtures, which emit flammable gases in contact with water | Void |
| Oxidising liquids | Void |
| Oxidising solids | Void |
| Organic peroxides | Void |
| Corrosive to metals | Void |
| Desensitised explosives | Void |

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if handled and stored according to specifications.

10.3 Possibility of hazardous reactions Reacts with strong oxidising agents

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

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10.6 Hazardous decomposition products:

None if used properly.

None if stored properly.

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity:** Based on available data, the classification criteria are not met.

| LD/LC50 values that are relevant for classification: | | |
|--|----------|--|
| CAS: 25068-38-6 reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) | | |
| Oral | LD50 | >10,000 mg/kg (rat) |
| Dermal | LD50 | >2,000 mg/kg (rat) |
| CAS: 933999-84-9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane | | |
| Oral | LD50 | 8,500 mg/kg (rat) |
| Dermal | LD50 | >4,900 mg/kg (rat) |
| CAS: 111-76-2 2-butoxyethanol | | |
| Oral | LD50 | 1,200 mg/kg (ATE) 1,480 mg/kg (rat) |
| Dermal | LD50 | mg/kg (rabbit) |
| Inhalative | LC50/4 h | 3 mg/l (ATE) |

Skin corrosion/irritation: Causes skin irritation.**Serious eye damage/irritation:** Causes serious eye irritation.**Sensitisation:** May cause an allergic skin reaction.**Germ cell mutagenicity:** Based on available data, the classification criteria are not met.**Carcinogenicity:** Based on available data, the classification criteria are not met.**Reproductive toxicity:** Based on available data, the classification criteria are not met.**STOT-single exposure:** Based on available data, the classification criteria are not met.**STOT-repeated exposure:** Based on available data, the classification criteria are not met.**Aspiration hazard:** Based on available data, the classification criteria are not met.**11.2 Information on other hazards****Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information**12.1 Toxicity****Aquatic toxicity:**

| | |
|---|-------------------------|
| CAS: 933999-84-9 Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane | |
| EC50/48h | 67 mg/l (Daphnia magna) |

12.2 Persistence and degradability No further relevant information available.**12.3 Bioaccumulative potential** No further relevant information available.**12.4 Mobility in soil** No further relevant information available.**12.5 Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects**Remark:** Toxic for fish**Additional ecological information:****General notes:**

Do not allow product to reach ground water, bodies of water or sewage system.

Hazardous to drinking water even if small quantities leak into soil.

Also toxic for fish and plankton in bodies of water.

Toxic for aquatic organisms

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SECTION 13: Disposal considerations

Recommendation

The given refuse codes are recommendations based upon the intended use of the product. Because of special use and disposal conditions at the user's, other codes may apply under other conditions. Hardened material can be disposed of as building rubble.

| | |
|---------------------------------|---|
| European waste catalogue | |
| 08 01 11* | waste paint and varnish containing organic solvents or other hazardous substances |

Uncleaned packaging:**Recommendation:**

Disposal must be made according to official regulations.
Packaging can be reused or recycled after cleaning.

* SECTION 14: Transport information

| | |
|---|--|
| 14.1 UN number or ID number ADR, IMDG, IATA | Void |
| 14.2 UN proper shipping name ADR, IMDG, IATA | Void |
| 14.3 Transport hazard class(es) ADR, ADN, IMDG, IATA Class | Void |
| 14.4 Packing group ADR, IMDG, IATA | Void |
| 14.5 Environmental hazards: Marine pollutant: | Yes |
| 14.6 Special precautions for user | Not applicable. |
| 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| Transport/Additional information: | |
| ADR Remarks: | In drums/vessels ≤ 5 L/Kg no dangerous good according transport regulations. |
| IMDG Remarks: | In drums/vessels ≤ 5 L/Kg no dangerous good according transport regulations. |
| IATA Remarks: | In drums/vessels ≤ 5 L/Kg no dangerous good according transport regulations. |
| UN "Model Regulation": | Void |

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**Directive 2012/18/EU**

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category E2 Hazardous to the Aquatic Environment

Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

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| |
|---|
| DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II |
|---|

| |
|------------------------------------|
| None of the ingredients is listed. |
|------------------------------------|

| |
|----------------------------------|
| REGULATION (EU) 2019/1148 |
|----------------------------------|

| |
|---|
| Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3)) |
|---|

| |
|------------------------------------|
| None of the ingredients is listed. |
|------------------------------------|

| |
|--|
| Annex II - REPORTABLE EXPLOSIVES PRECURSORS |
|--|

| |
|------------------------------------|
| None of the ingredients is listed. |
|------------------------------------|

National regulations**Other regulations, limitations and prohibition ordinances**

APME document: "Epoxy resins and curing agents: Toxicology, working safety, environment."

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

| |
|--------------------------------------|
| SECTION 16: Other information |
|--------------------------------------|

This data is based on our present state of knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship. Delivery specifications are found in the respective Technical Information Sheets.

Relevant phrases

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

EUH205 Contains epoxy constituents. May produce an allergic reaction.

Classification according to Regulation (EC) No 1272/2008 Calculation method**Department issuing data specification sheet:** Product Safety department / EHS**Version number of previous version:** 1**Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Acute Tox. 3: Acute toxicity – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3