

Page 1/10

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.05.2024 Version number 3 (replaces version 2) Revision: 23.05.2024

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

1.1 Product identifier

Trade name EPOXY UNIVERSAL GRAU KOMP A

Article number: 0020559200

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

No further relevant information available.

Application of the substance / the mixture Coating

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Remmers GmbH Remmers (UK) Limited Bernhard-Remmers-Str. 13 Unit 4, Lloyds Court

D-49624 Löningen / Germany Manor Royal, Crawley - West Sussex RH10 9QU

Tel.: +49(0)5432/83-0 fon +44 (0) 1293 594 010 Fax: +49(0)5432/3985 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

Flam. Liq. 3 H226 Flammable liquid and vapour.

Skin Irrit. 2 H315 Causes skin irritation.

Eve Dam. 1 H318 Causes serious eye damage. Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful 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







GHS02 GHS05

Signal word Danger

Hazard-determining components of labelling:

phenol, methylstyrenated

n-butanol

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 23.05.2024 Version number 3 (replaces version 2) Revision: 23.05.2024

Trade name EPOXY UNIVERSAL GRAU KOMP A

(Contd. of page 1)

Hazard statements

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

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

protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

Additional information:

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB:

CAS: 68512-30-1 phenol, methylstyrenated

Determination of endocrine-disrupting properties Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture consisting of the following components.

| Dangerous components [% w/w]: | | | | |
|---|--|----------|--|--|
| CAS: 68512-30-1 EINECS: 270-966-8 | phenol, methylstyrenated Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 3, H412 vPvB | ≥25-<30% | | |
| CAS: 7727-43-7 EINECS: 231-784-4 Reg.nr.: 01-2119491274-35- XXXX | barium sulphate, natural substance with a Community workplace exposure limit | ≥10-<20% | | |
| CAS: 13463-67-7 EINECS: 236-675-5 | titanium dioxide substance with a Community workplace exposure limit | ≥5-<10% | | |
| CAS: 71-36-3 EINECS: 200-751-6 Index number: 603-004-00-6 Reg.nr.: 01-2119484630-38- XXXX | n-butanol Flam. Liq. 3, H226; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335-H336 | ≥5-<10% | | |
| CAS: 107-98-2 EINECS: 203-539-1 Index number: 603-064-00-3 | 1-methoxy-2-propanol Flam. Liq. 3, H226; STOT SE 3, H336 | ≥2.5-<5% | | |
| CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9 Reg.nr.: 01-2119488216-32- XXXX | xylene Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; Aquatic Chronic 3, H412 | ≥2.5-<5% | | |

(Contd. on page 3)

according to 1907/2006/EC, Article 31

Printing date 23.05.2024 Version number 3 (replaces version 2) Revision: 23.05.2024

Trade name EPOXY UNIVERSAL GRAU KOMP A

(Contd. of page 2)

EC number: 918-668-5 hydrocarbons, C9, aromatics ≥1-<2.5% Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335-H336, EUH066 Reg.nr.: 01-2119455851-35-XXXX

Additional information

Benzene content: < 0,1% Note P is applicable. It is not necessary to classify nor to mark the product as carcinogenic.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

After inhalation

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. Then consult doctor.

After swallowing

Rinse out mouth immediately with plenty of water and administer plenty of water in small swallows (diluting effect).

4.2 Most important symptoms and effects, both acute and delayed

In case of prolonged/repeated exposure or in high concentrations:

Headache

nausea

Dizziness

Dazed

anaesthetic effect

Unconsciousness

Excessive contact with skin, eyes or respiratory system may cause irritation.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents

Water

Fire-extinguishing powder

BC powder

Alcohol-resistant foam

Carbon dioxide

For safety reasons unsuitable extinguishing agents Water with a full water jet.

5.2 Special hazards arising from the substance or mixture

May be released in case of fire

Carbon monoxide (CO)

Carbon dioxide

further harmful conflagration gases and fumes

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

Formation of poisonous gases during heating or in fires.

Vapours are heavier than air and spread out over the ground. Ignition over greater distances is possible.

5.3 Advice for firefighters

Protective equipment:

Wear self-contained breathing apparatus.

Wear full protective suit.

Put on breathing apparatus.

Additional information

Cool endangered containers with water spray jet.

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

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

(Contd. on page 4)

Printing date 23.05.2024

Safety data sheet

Version number 3 (replaces version 2)

according to 1907/2006/EC, Article 31

Trade name EPOXY UNIVERSAL GRAU KOMP A

(Contd. of page 3)

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from ignition sources

Put on breathing apparatus.

Wear protective equipment. Keep unprotected persons away.

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).

Use neutralising agent.

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

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.

Ensure good ventilation/exhaust in workplaces.

Avoid the formation of aerosols.

Information about protection against explosions and fires:

Fumes can combine with air to form an explosive mixture.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep breathing equipment ready.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and containers:

Ventilate storage and work rooms sufficiently.

Install solvent resistant, sealed floor.

Information on storage in a common storage facility:

Suitable material for containers and pipes: Light metals and their alloys.

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

| Com | Components with limit values that require monitoring at the workplace: | | | |
|------------------------------------|---|--|--|--|
| CAS: | CAS: 7727-43-7 barium sulphate, natural | | | |
| WEL | Long-term value: 10* 4** mg/m³ *inhalable dust **respirable dust | | | |
| CAS: | CAS: 13463-67-7 titanium dioxide | | | |
| WEL | Long-term value: 10* 4** mg/m³ *total inhalable **respirable | | | |
| CAS: | CAS: 71-36-3 n-butanol | | | |
| WEL | Short-term value: 154 mg/m³, 50 ppm Sk | | | |
| CAS: 107-98-2 1-methoxy-2-propanol | | | | |
| WEL | Short-term value: 560 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm Sk | | | |

(Contd. on page 5)

Revision: 23.05.2024

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 23.05.2024

Version number 3 (replaces version 2)

Trade name EPOXY UNIVERSAL GRAU KOMP A

(Contd. of page 4)

Revision: 23.05.2024

WEL Short-term value: 441 mg/m³, 100 ppm Long-term value: 220 mg/m³, 50 ppm Sk; BMGV

Ingredients with biological limit values:

CAS: 1330-20-7 xylene

BMGV 650 mmol/mol creatinine

Medium: urine

Sampling time: post shift
Parameter: methyl hippuric acid

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

8.2 Exposure controls

Appropriate engineering controls No further data; see section 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures

Do not eat, drink or smoke while working.

Apply solvent-resistant skin protection preparation before beginning work.

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 evalutated by the employer depending on the types of operations and the local circumstances. If a risk assessment onsite shows that there is no risk for employees, the personal protective euiqment is not required or the amount of the PPE can be adpated accordingly.

Respiratory equipment:

Filter A/P2.

Only use ambient air independent respiratory equipment in pits, shafts and silos!

In case of brief exposure or low pollution load, use respiratory protection equipment with filter. In case of intensive or longer exposure, use self-contained respiratory protection equipment.

Hand protection

Solvent resistant 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection

if there is a risk of splashes

Tightly sealed safety glasses.

Body protection: Protective work clothing.

(Contd. on page 6)

according to 1907/2006/EC, Article 31

Version number 3 (replaces version 2) Printing date 23.05.2024 Revision: 23.05.2024

Trade name EPOXY UNIVERSAL GRAU KOMP A

(Contd. of page 5)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state Fluid Colour: Grey Odour: Solvent-like **Odour threshold:** Not determined. Melting point/freezing point: Not determined

Boiling point or initial boiling point and boiling

range Not determined **Flammability** Flammable.

Lower and upper explosion limit

Not determined. Lower: Upper: Not determined.

Flash point: 32 °C

Auto-ignition temperature: not applicable **Decomposition temperature:** Not determined. pН Not determined.

Viscosity:

Kinematic viscosity thixotropic dynamic at 20 °C: 2000 mPas

Solubility

Not miscible or difficult to mix Water:

Partition coefficient n-octanol/water (log value) Not determined. Vapour pressure: Not determined.

Density and/or relative density

Density at 20 °C: 1.37 g/cm³ 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. However, formation of

dangerous explosive vapour/air mixtures is

possible.

Solvent separation test < 3 %

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 Flammable liquid and vapour.

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

(Contd. on page 7)

according to 1907/2006/EC, Article 31

Version number 3 (replaces version 2) Printing date 23.05.2024 Revision: 23.05.2024

Trade name EPOXY UNIVERSAL GRAU KOMP A

(Contd. of page 6)

| 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.

Avoid: heat, flames, sparks

10.3 Possibility of hazardous reactions Strong exothermic reaction with epoxy resins possible.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: Acids

10.6 Hazardous decomposition products: No dangerous decomposition products known

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: 68512-30-1 phenol, methylstyrenated | | | |
| Oral | LD50 | >2,000 mg/kg (rat) | |
| Dermal | LD50 | >2,000 mg/kg (rat) | |
| Inhalative | LC50/4 h | mg/l (rat) | |

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: Causes serious eye damage.

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.

Experience with humans:

Frequent or longer lasting skin contact may degrease and dry out skin which may lead to skin irritation and inflammation (dermatitis).

11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

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:

CAS: 68512-30-1 phenol, methylstyrenated

12.6 Endocrine disrupting properties

For information on endocrine disrupting properties see section 11.

12.7 Other adverse effects No further relevant information available.

Remark: Harmful to 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.

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 23.05.2024

Version number 3 (replaces version 2)

Trade name EPOXY UNIVERSAL GRAU KOMP A

(Contd. of page 7)

Revision: 23.05.2024

Harmful to aquatic organisms

SECTION 13: Disposal considerations

Recommendation

Not hardened material must be disposed of as hazardous waste according to official regulations. Hardened product remains may be disposed of as building rubble or put into household garbage. 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. Do not dispose of together with household garbage. Do not allow product to reach sewage system.

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

| SECTION 14: Transport information | | | | | |
|--|--|--|--|--|--|
| 14.1 UN number or ID number ADR, ADN, IMDG IATA | Void UN1263 | | | | |
| 14.2 UN proper shipping name ADR, ADN, IMDG IATA | Void PAINT | | | | |
| 14.3 Transport hazard class(es) | | | | | |
| ADR, ADN, IMDG Class | Void | | | | |
| IATA | | | | | |
| | | | | | |
| Class | 3 Flammable liquids. | | | | |
| Label | 3 | | | | |
| 14.4 Packing group | | | | | |
| ADR, IMDG | Void | | | | |
| IATA | III | | | | |
| 14.5 Environmental hazards: Marine pollutant: | No | | | | |
| 14.6 Special precautions for user | Not applicable. | | | | |
| 14.7 Maritime transport in bulk accordi | | | | | |
| IMO instruments | Not applicable. | | | | |
| Transport/Additional information: | | | | | |
| ADR | | | | | |
| Remarks: | In drums/vessels < 450 litre: | | | | |
| | Not a dangerous good | | | | |
| | Transport according to annotations 2.2.3.1.5 ADR because of high viscosity | | | | |
| IMDG | | | | | |
| Remarks: | In drums/vessels < 30 litres: | | | | |
| | Not a dangerous good | | | | |
| | Transport in accordance with paragraph 2.3.2.5 of the IMDG Code | | | | |

(Contd. on page 9)

according to 1907/2006/EC, Article 31

Printing date 23.05.2024

Version number 3 (replaces version 2)

Trade name EPOXY UNIVERSAL GRAU KOMP A

(Contd. of page 8)

Revision: 23.05.2024

UN "Model Regulation": Void

SECTION 15: Regulatory information

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

Poisons Act

Regulated explosives precursors

None of the ingredients is listed.

Regulated poisons

None of the ingredients is listed.

Reportable explosives precursors

None of the ingredients is listed.

Reportable poisons

None of the ingredients is listed.

Directive 2012/18/EU

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

Seveso category P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t

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

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

Observe the usual protective measures when working and for storage.

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

Harmful if swallowed. H302

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

Causes serious eye damage. H318

Causes serious eye irritation. H319

Harmful if inhaled. H332

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure. H373

Toxic to aquatic life with long lasting effects. H411

Harmful to aquatic life with long lasting effects. H412

Page 10/10

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 23.05.2024 Version number 3 (replaces version 2)

Trade name EPOXY UNIVERSAL GRAU KOMP A

(Contd. of page 9)

Revision: 23.05.2024

EUH066 Repeated exposure may cause skin dryness or cracking.

Classification according to Regulation (EC) No 1272/2008 Calculation method

Department issuing data specification sheet: Product Safety department / EHS

Version number of previous version: 2

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 Flam. Liq. 3: Flammable liquids - Category 3

Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation - Category 1

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2

Asp. Tox. 1: Aspiration hazard - 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