

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 13.12.2022

Version number 5 (replaces version 4)

Revision: 13.12.2022

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

1.1 Product identifier

Trade name **Epoxy ESD Color 3K, Comp. A**

Article number: 6666, 6668

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
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.
Muta. 2	H341 Suspected of causing genetic defects.
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 GHS08 GHS09

Signal word Warning

Hazard-determining components of labelling:

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

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 13.12.2022

Version number 5 (replaces version 4)

Revision: 13.12.2022

Trade name **Epoxy ESD Color 3K, Comp. A**

(Contd. of page 1)

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H341 Suspected of causing genetic defects.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P321 Specific treatment (see on this label).

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

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

P405 Store locked up.

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

Additional information:

EUH205 Contains epoxy constituents. May produce an allergic reaction.

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:** Not applicable.

* SECTION 3: Composition/information on ingredients

3.2 Mixtures**Description:** Mixture of the substances listed below with harmless additions.

Dangerous components [% w/w]:		
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 \leq 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 \geq 5% Eye Irrit. 2; H319: C \geq 5 %	\geq 40-<50%
CAS: 26761-45-5 EINECS: 247-979-2 Reg.nr.: 01-2119431597-33-XXXX	2,3-epoxypropyl neodecanoate Muta. 2, H341; Aquatic Chronic 2, H411; Skin Sens. 1, H317	\geq 10-<20%
CAS: 13463-67-7 EINECS: 236-675-5 Index number: 022-006-00-2 Reg.nr.: 01-2119489379-17-XXXX	titanium dioxide Carc. 2, H351	\geq 2.5-<5%
CAS: 16096-31-4 EINECS: 240-260-4 Reg.nr.: 01-2119463471-41-XXXX	1,6-Bis(2,3-epoxypropoxy)hexan Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412	\geq 0.5-<1%

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 13.12.2022

Version number 5 (replaces version 4)

Revision: 13.12.2022

Trade name **Epoxy ESD Color 3K, Comp. A**

(Contd. of page 2)

CAS: 68609-97-2 EINECS: 271-846-8 Index number: 603-103-00-4 Reg.nr.: 01-2119485289-22-XXXX	oxirane, mono[(C12-14-alkyloxy)methyl] derivs. Skin Irrit. 2, H315; Skin Sens. 1, H317	≥0.5-<1%
CAS: 108-83-8 EINECS: 203-620-1 Index number: 606-005-00-X Reg.nr.: 01-2119474441-41-XXXX	2,6-dimethylheptan-4-one Flam. Liq. 3, H226; STOT SE 3, H335 Specific concentration limit: STOT SE 3; H335: C ≥10 %	≥0.25-≤0.5%

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

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. If symptoms persist, consult doctor.

After swallowing Seek immediate medical advice.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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

Water spray jet

Carbon dioxide

Foam

Use fire fighting measures that suit the environment.

5.2 Special hazards arising from the substance or mixture

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

Hydrogen chloride (HCl)

further harmful conflagration gases and fumes

5.3 Advice for firefighters

Protective equipment: Wear self-contained 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.

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).

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.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 13.12.2022

Version number 5 (replaces version 4)

Revision: 13.12.2022

Trade name **Epoxy ESD Color 3K, Comp. A**

(Contd. of page 3)

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.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and containers: Prevent any penetration into the ground.

Information on storage in a common storage facility:

Store away from oxidising agents.
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: 13463-67-7 titanium dioxide	
WEL	Long-term value: 10* 4** mg/m ³ *total inhalable **respirable
CAS: 108-83-8 2,6-dimethylheptan-4-one	
WEL	Long-term value: 148 mg/m ³ , 25 ppm

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 item 7.

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:

In case vapours/aerosols develop:

Filter A (brown)

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

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

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.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 13.12.2022

Version number 5 (replaces version 4)

Revision: 13.12.2022

Trade name **Epoxy ESD Color 3K, Comp. A**

(Contd. of page 4)

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 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:	According to product specification
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Not determined
Boiling point or initial boiling point and boiling range	Not determined
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	> 110 °C
Ignition temperature:	not applicable
Decomposition temperature:	Not determined.
pH	Not determined.
Viscosity:	
Kinematic viscosity	Not determined.
dynamic at 20 °C:	1850 mPas
Solubility	
Water:	Not miscible or difficult to mix
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not determined.
Density and/or relative density	
Density at 20 °C:	1.43 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.

9.2 Other information

Appearance:	
Form:	Viscous
Important information on protection of health and environment, and on safety.	
Explosive properties:	Product is not explosive.
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	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 13.12.2022

Version number 5 (replaces version 4)

Revision: 13.12.2022

Trade name **Epoxy ESD Color 3K, Comp. A**

(Contd. of page 5)

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 Exothermic polymerisation

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products:

None if used properly.

None if stored properly.

May be released in fire:

Carbon monoxide and carbon dioxide

Hydrogen chloride (HCl)

Phenol

* 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 \leq 700)

Oral	LD50	>10,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
CAS: 26761-45-5 2,3-epoxypropyl neodecanoate		
Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>5 mg/l (rat)

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: Causes serious eye irritation.

Sensitisation: May cause an allergic skin reaction.

Germ cell mutagenicity: Suspected of causing genetic defects.

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: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 5 (replaces version 4)

Revision: 13.12.2022

Trade name **Epoxy ESD Color 3K, Comp. A**

(Contd. of page 6)

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

* **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****14.1 UN number or ID number
ADR, IMDG, IATA**

UN3082

**14.2 UN proper shipping name
ADR**3082 ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin (reaction
product: bisphenol A-(epichlorhydrin) (number average
molecular weight ≤ 700)))**IMDG**ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (Epoxy Resin (reaction product:
bisphenol A-(epichlorhydrin) (number average
molecular weight ≤ 700))), MARINE POLLUTANT**IATA**ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (Epoxy Resin (reaction product:
bisphenol A-(epichlorhydrin) (number average
molecular weight ≤ 700)))**14.3 Transport hazard class(es)****ADR****Class**9 (M6) Miscellaneous hazardous substances and
articles.

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31



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Version number 5 (replaces version 4)

Revision: 13.12.2022

Trade name **Epoxy ESD Color 3K, Comp. A**

(Contd. of page 7)

Label	9
IMDG	
	
Class	9 Miscellaneous hazardous substances and articles.
Label	9
IATA	
	
Class	9 Miscellaneous hazardous substances and articles.
Label	9
14.4 Packing group ADR, IMDG, IATA	III
14.5 Environmental hazards:	
Marine pollutant:	Yes Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
14.6 Special precautions for user	Warning: Miscellaneous hazardous substances and articles.
hazard identification number:	90
EMS Number:	F-A,S-F
Stowage Category	A
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
Transport category	3
Tunnel restriction code	(-)
IMDG	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN) (NUMBER AVERAGE MOLECULAR WEIGHT ≤ 700))), 9, III

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

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 5 (replaces version 4)

Revision: 13.12.2022

Trade name **Epoxy ESD Color 3K, Comp. A**

(Contd. of page 8)

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

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
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None of the ingredients is listed.

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

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H341 Suspected of causing genetic defects.

H351 Suspected of causing cancer.

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**Date of previous version:** 08.05.2020**Version number of previous version:** 4**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

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

Muta. 2: Germ cell mutagenicity – Category 2

Carc. 2: Carcinogenicity – Category 2

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

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