

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

Printing date 31.07.2019

Version number 4

Revision: 15.10.2018

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**Trade name **Epoxy WHG Color AS, Comp. A**

Article number: 1431, 1435

**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  
Postfach 1255  
D-49624 Lönningen / Germany  
Tel.: +49(0)5432/83-0  
Fax: +49(0)5432/3985

Remmers (UK) Limited  
Unit B1 The Fleming Centre  
West Sussex RH10 9NN  
fon +44 (0) 1293 594 010  
fax +44 (0) 1293 594 037

**Information department:**

Product Safety department: Tel.: Steve Dunn Tel.: +44 (0) 1293 594 010  
E-Mail: sales@remmers.co.uk

**1.4 Emergency telephone number:**

during working hours:

U.K.: Tel.: +44 (0) 1293 594 010

sales@remmers.co.uk

Head Office Germany: Tel.: +49 (0)5432 83 187

info@remmers.de

after working hours: Tel.: +49 (0)171 21 34 091

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 CLP regulation.

**Hazard pictograms**

GHS07   GHS09

Signal word Warning

**Hazard-determining components of labelling:**

bisphenol F-(epichlorhydrin); epoxy resin(number average molecular weight&lt;700)

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)

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## Trade name **Epoxy WHG Color AS, Comp. A**

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Oxirane, 2-(chloromethyl)-, polymer with alphahydro-omegahydroxypoly[oxy(methyl-1,2-ethanediyl)] hexandiol diglycidylether

### Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

### Precautionary statements

P273 Avoid release to the environment.

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

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

### Additional information:

EUH205 Contains epoxy constituents. May produce an allergic reaction.

### 2.3 Other hazards

The residual content of epichlorhydrin corresponds to APME recommendations: modified resins < 10 ppm (0.001%)

### Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

\*

## SECTION 3: Composition/information on ingredients

### 3.2 Chemical characterisation: Mixtures

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

<b>Dangerous components:</b>		
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	≥20-<25%
CAS: 7727-43-7 EINECS: 231-784-4	barium sulphate, natural substance with a Community workplace exposure limit	20-40%
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	5-10%
CAS: 9072-62-2	Oxirane, 2-(chloromethyl)-, polymer with alphahydro-omegahydroxypoly[oxy(methyl-1,2-ethanediyl)] ----- Skin Sens. 1, H317	5-10%
CAS: 16096-31-4 EINECS: 240-260-4 Reg.nr.: 01-2119463471-41-XXXX	hexandiol diglycidylether ----- Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412	≥5-<10%
CAS: 13463-67-7 EINECS: 236-675-5 Reg.nr.: 01-2119489379-17-XXXX	titanium dioxide substance with a Community workplace exposure limit	5-10%
CAS: 12001-26-2 EINECS: 234-426-5	Glimmer substance with a Community workplace exposure limit	2.5-5%
CAS: 14808-60-7 EINECS: 238-878-4 Reg.nr.: 01-2120770509-45-XXXX	quartz flour ----- STOT RE 2, H373	2.5-5%

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

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## 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

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

If skin irritation continues, consult a doctor.

Wash immediately with water and soap and rinse thoroughly.

#### After eye contact

Seek immediate medical advice.

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

#### After swallowing

Rinse out mouth and then drink plenty of water.

Seek medical treatment.

### 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

No further relevant information available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing agents** 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)

Carbon dioxide

further harmful conflagration gases and fumes

### 5.3 Advice for firefighters

#### Protective equipment:

Wear full protective suit.

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.

### 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.

**Information about protection against explosions and fires:** No special requirements.

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**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:** none**Further information about storage conditions:**

Store container in a well ventilated position.

Protect from frost.

Keep container tightly closed.

**7.3 Specific end use(s)** No further relevant information available.**SECTION 8: Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see item 7.**8.1 Control parameters**

<b>Components with limit values that require monitoring at the workplace:</b>	
<b>CAS: 7727-43-7 barium sulphate, natural</b>	
WEL	Long-term value: 10* 4** mg/m <sup>3</sup> *inhalable dust **respirable dust
<b>CAS: 13463-67-7 titanium dioxide</b>	
WEL	Long-term value: 10* 4** mg/m <sup>3</sup> *total inhalable **respirable
<b>CAS: 12001-26-2 Glimmer</b>	
WEL	Long-term value: 10* 0.8** mg/m <sup>3</sup> *total inhalable **respirable

**Additional information:** The lists that were valid during compilation were used as a basis.**8.2 Exposure controls****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.

**Respiratory equipment:**

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

**Protection of hands:**

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.

**Penetration time of glove material**

The determined penetration times according to EN 374 part III 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 protection:** Tightly sealed safety glasses.**Body protection:** Protective work clothing.

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## SECTION 9: Physical and chemical properties

<b>9.1 Information on basic physical and chemical properties</b>	
<b>General Information</b>	
<b>Appearance:</b>	
<b>Form:</b>	Liquid
<b>Colour:</b>	Different, according to dye
<b>Odour:</b>	Weak, characteristic
<b>Odour threshold:</b>	Not determined.
<b>pH-value:</b>	Not determined.
<b>Change in condition</b>	
<b>Melting point/freezing point:</b>	Not determined
<b>Initial boiling point and boiling range:</b>	> 200 °C
<b>Flash point:</b>	> 100 °C (Setaflash)
<b>Inflammability (solid, gaseous)</b>	Not applicable.
<b>Ignition temperature:</b>	not applicable
<b>Decomposition temperature:</b>	Not determined.
<b>Self-inflammability:</b>	Product is not self-igniting.
<b>Explosive properties:</b>	Product is not explosive.
<b>Explosive Limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>Vapour pressure:</b>	Not determined.
<b>Density at 20 °C:</b>	1.6 g/cm <sup>3</sup>
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Evaporation rate</b>	Not determined.
<b>Solubility in / Miscibility with</b>	
<b>Water:</b>	Not miscible or difficult to mix
<b>Distribution coefficient (n-octanol/water):</b> Not determined.	
<b>Viscosity:</b>	
<b>dynamic at 20 °C:</b>	4500 mPas
<b>kinematic:</b>	Not determined.
<b>Solvent separation test</b>	< 3 %
<b>9.2 Other information</b>	No further relevant information available.

## 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**

May produce violent reactions with bases and numerous organic substances including alcohols and amines

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:** Irritating gases/vapours

## SECTION 11: Toxicological information

**11.1 Information on toxicological effects****Acute toxicity:** Based on available data, the classification criteria are not met.

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<b>LD/LC50 values that are relevant for classification:</b>		
<b>CAS: 25068-38-6 reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <math>\leq</math> 700)</b>		
Oral	LD50	>10,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
<b>CAS: 16096-31-4 hexandiol diglycidylether</b>		
Oral	LD50	2,900 mg/kg (rat)
Dermal	LD50	>4,900 mg/kg (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:** 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.**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.**Ecotoxicological 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

**12.5 Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects** No further relevant information available.**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.**SECTION 14: Transport information****14.1 UN-Number**  
**ADR, IMDG, IATA**

UN3082

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<b>14.2 UN proper shipping name</b> <b>ADR</b>  <b>IMDG</b>  <b>IATA</b>	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))
<b>14.3 Transport hazard class(es)</b> <b>ADR</b>  <b>Class</b> <b>Label</b>	9 (M6) Miscellaneous hazardous substances and articles. 9
<b>IMDG, IATA</b>  <b>Class</b> <b>Label</b>	9 Miscellaneous hazardous substances and articles. 9
<b>14.4 Packing group</b> <b>ADR, IMDG, IATA</b>	III
<b>14.5 Environmental hazards:</b> <b>Marine pollutant:</b>  <b>Special marking (ADR):</b> <b>Special marking (IATA):</b>	No Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
<b>14.6 Special precautions for user</b>  <b>hazard identification number:</b> <b>EMS Number:</b> <b>Stowage Category</b>	Warning: Miscellaneous hazardous substances and articles. 90 F-A,S-F A
<b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
<b>Transport/Additional information:</b>	Not a hazardous good according to the above regulations.
<b>ADR</b> <b>Limited quantities (LQ)</b> <b>Excepted quantities (EQ)</b>  <b>Transport category</b>	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3

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<b>IMDG</b> <b>Limited quantities (LQ)</b> <b>Excepted quantities (EQ)</b>	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<b>UN "Model Regulation":</b>	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL-A-(EPICHLORHYDRIN) EPOXY RESIN (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

**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

#### 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

Delivery specifications are found in the respective Technical Information Sheets.

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.

#### Relevant phrases

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

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

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

**Department issuing data specification sheet:** Product Safety department / EHS

#### Abbreviations and acronyms:

ADR: Accord européen sur le transport 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

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

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

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