Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

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

1.1. Product identifier

Article No. (manufacturer/supplier)	57850 Kroschke sign-international GmbH, vertrieb@kroschke.com
Trade name/designation	Basis for Epoxy - Paint photoluminescent, Comp. A EPWT 0100 UFI: 4113-D0JR-T006-5J9T

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

Relevant identified uses
coating for industrial and marine use
For commercial user only.
This product is a with biocidal products treated article.

1.3. Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

Corroconsult GmbH	
Elstorfer Ring 70	Telefon: +49(0)40 /27861277
D-21149 Hamburg	E-mail: office@corroconsult.de

Department responsible for information:
laboratory

E-mail (competent person)	lab@wilckens.com

1.4. Emergency telephone number

Emergency telephone number	+49 4124 606 188

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.

2.2. Label elements

Contains the biocidal product CMIT / MIT 3: 1 to maintain storage stability.

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms

Warning

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

P261	Avoid breathing vapours.
P272	Contaminated work clothing should not be allowed out of the workplace.
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 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.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing.
P391	Collect spillage.

P501 Dispose of contents/container to industrial incineration plant.

Hazard components for labelling
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane; (epoxy resin MW < 700)

Supplemental hazard information
EUH205 Contains epoxy constituents. May produce an allergic reaction.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Description epoxycoat

Hazardous ingredients

Classification according to Regulation (EC) No 1272/2008 [CLP]

EC No. CAS No. Index No.	REACH No. Designation classification: // Remark	weight-%
500-033-5 25068-38-6 603-074-00-8	01-2119456619-26-XXXX 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane; (epoxy resin MW < 700) Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / Skin Sens. 1B H317 / Aquatic Chronic 2 H411	70 < 80
608-164-0 28064-14-4 603-074-00-8	01-2119454392-40-XXXX Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenolBPFDGE Skin Irrit. 2 H315 / Skin Sens. 1 H317 / Aquatic Chronic 2 H411	30 < 40

Additional information
Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation
Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact
Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

Following ingestion
If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed
In all cases of doubt, or when symptoms persist, seek medical advice.

4.3. Indication of any immediate medical attention and special treatment needed
First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Unsuitable extinguishing media
strong water jet

5.2. Special hazards arising from the substance or mixture
Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters
Provide a conveniently located respiratory protective device.Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Ventilate affected area. Do not breathe vapours.

6.2. Environmental precautions
Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up
Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

6.4. Reference to other sections
Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid contact with skin, eyes and clothes. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRGS 727)".

Hints on joint storage
Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions
Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

7.3. Specific end use(s)
Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Occupational exposure limit values

not applicable

8.2. Exposure controls
Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Personal protection equipment

Respiratory protection
If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)
Thickness of the glove material > 0,4 mm ; Breakthrough time: > 480 min.
Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374
Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection
Wear closely fitting protective glasses in case of splashes.

Body protection
Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures
After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls
Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	refer to label
Odour:	characteristic
Odour threshold:	not applicable
Melting point/freezing point:	not applicable
Initial boiling point and boiling range:	not applicable
Flammability:	Flammable solid.
Lower and upper explosion limit:	
Lower explosion limit:	not applicable
Upper explosion limit:	not applicable
Flash point:	99 °C Method: DIN 53213-1
Auto-ignition temperature:	not applicable
Decomposition temperature:	not applicable
pH at 20 °C:	not applicable
Cinematic viscosity (40°C):	> 1000 mm^2/s
Viscosity at 20 °C:	5000 mPa* s Method: TM 33 b
Solubility(ies):	
Water solubility at 20 °C:	completely miscible
Partition coefficient: n-octanol/water:	see section 12
Vapour pressure at 20 °C:	not applicable
Density and/or relative density:	
Density at 20 °C:	1,18 g/cm^3
Relative vapour density:	not applicable
particle characteristics:	not applicable

9.2. Other information

Solid content:	100 weight-%
solvent content:	
Organic solvents:	0 weight-%
Water:	0 weight-%

SECTION 10: Stability and reactivity

10.1. Reactivity
No information available.

10.2. Chemical stability
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. Possibility of hazardous reactions
Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials
not applicable

10.6. Hazardous decomposition products
Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 *

Acute toxicity

Basis für EPW 2 EPWT 0100
oral, LD50, Rat

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenolBPFDGE
oral, LD50, Rat: 23800 mg/kg

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane; (epoxy resin MW < 700)
oral, LD50, Rat: > 2000 mg/kg
dermal, LD50, Rat: > 1200 mg/kg
dermal, LD50, Rabbit: > 2000 mg/kg

Skin corrosion/irritation; Serious eye damage/eye irritation

Causes skin irritation.

Causes serious eye irritation.

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenolBPFDGE
Skin (4 h)

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenolBPFDGE
Skin:

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Based on available data, the classification criteria are not met.

STOT-single exposure; 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.

Practical experience/human evidence

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Overall assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

Remark

There is no information available on the preparation itself . The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and has not been classified.

11.2. Information on other hazards

Endocrine disrupting properties
No information available.

SECTION 12: Ecological information

Classification according to Regulation (EC) No 1272/2008 [CLP]
There is no information available on the preparation itself .
Do not allow to enter into surface water or drains.

12.1. Toxicity

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenolBPFDGE
Algae toxicity, ErC50: < 10 mg/L

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane; (epoxy resin MW < 700)
Fish toxicity, LC50: 1,3 mg/L (96 h)
Method: OECD 203
Daphnia toxicity, EC50: 2,1 mg/L (48 h)
Method: OECD 211
Algae toxicity, ErC50: > 11 mg/L (72 h)

Long-term Ecotoxicity

Toxic to aquatic life with long lasting effects.

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenolBPFDGE
Fish toxicity, LC50 (96 h)
Algae toxicity, ErC50 1 - 10 mg/L

12.2. Persistence and degradability
Toxicological data are not available.

12.3. Bioaccumulative potential
Toxicological data are not available.

Bioconcentration factor (BCF)

Toxicological data are not available.

12.4. Mobility in soil
Toxicological data are not available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties
No information available.

12.7. Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product
Recommendation
Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC
080111* Waste paint and varnish containing organic solvents or other dangerous substances
*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package
Recommendation
Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

This mixture is not classified as dangerous according to international transport regulations (ADR/RID, IMDG, ICAO/IATA).

14.1. UN number or ID number

UN 3082

14.2. UN proper shipping name

Land transport (ADR/RID):	Environmentally hazardous substance, liquid, n.o.s. (epoxy resin)
Sea transport (IMDG):	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)
Air transport (ICAO-TI / IATA-DGR):	Environmentally hazardous substance, liquid, n.o.s. (epoxy resin)

14.3. Transport hazard class(es)

9

14.4. Packing group

III

14.5. Environmental hazards

Land transport (ADR/RID)	UMWELTGEFAEHRDEND
Marine pollutant	p

14.6. Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8

Further information

Land transport (ADR/RID)

Tunnel restriction code	-
in packages <= 5 kg	Kein Gut der Klasse 9

Sea transport (IMDG)

EmS-No.	F-A, S-F
in packages <= 5 kg	"not restricted 2.10.2.7"

Air transport (ICAO-TI / IATA-DGR)

in packages <= 5 kg	Not Restricted, as per Special Provision A197

14.7. Maritime transport in bulk according to IMO instruments

No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

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

EU legislation

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]
VOC-value (in g/L): 0

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds
VOC product category: (Cat. B/e) ; VOC limit value: 840 g/l
Maximum VOC content of the product in a ready to use condition (in g/L): 103

National regulations

Restrictions of occupation
Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

The product complies with Directives 2002/95/EC (RoHS), 2011/65/ EC (ROHS-2I) and adjustment policy 2015/863/EC
The product presumably contains no PAHs, no conflict minerals and no substances listed in BOMcheck Version 4.5 (June2015).
The raw materials of the product are registered / pre-registered in accordance with Directive 1907/2006 / (REACH)
The product does not contain substances in concentrations > 0,1% according to Art. 57 in conjunction with Art. 59 / Annex XIV 1907 / 2006EG, from 17.01.2022; (SVHC or candidates until 01/2022)

15.2. Chemical Safety Assessment
For the following substances of this mixture a chemical safety assessment has been carried out:

EC No. CAS No.	Designation	REACH No.
500-033-5 25068-38-6	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane; (epoxy resin MW < 700)	01-2119456619-26-XXXX
608-164-0 28064-14-4	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenolBPFDGE	01-2119454392-40-XXXX

SECTION 16: Other information

Full text of classification in section 3:

Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Skin Sens. 1B / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.

Classification procedure

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Skin Irrit. 2	Skin corrosion/irritation	Calculation method.
Eye Irrit. 2	Serious eye damage/eye irritation	Calculation method.
Skin Sens. 1	Respiratory or skin sensitisation	Calculation method.
Aquatic Chronic 2	Hazardous to the aquatic environment	Calculation method.

Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code	International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

Further information

Classification according to Regulation (EC) No 1272/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations.Without written approval, the product must not be used for purposes different from those mentioned in section 1.It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations.The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

* Data changed compared with the previous version