according to Regulation (EC) No. 1907/2006



Commercial Product Name: ALEXSEAL P1610-Protective Primer 161

Quality No.: 1536098023000

Revision Date 03.11.2022 Print Date 03.11.2022 Version 3

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

1.1 Product identifier

: ALEXSEAL P1610-Protective Primer 161 9802 White Trade name

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

Use of the Sub-: Industrial serial painting

stance/Mixture

1.3 Details of the supplier of the safety data sheet

Producer : Mankiewicz Gebr. & Co. (GmbH & Co. KG)

Georg-Wilhelm-Strasse 189

21107 Hamburg

Germany

Only for UK:

Supplied by Mankiewicz UK LLP 26 Ashville Way, Whetstone,

Leicester LE8 6NU

United Kingdom

Telephone +49 (0) 40 75103 0 Telefax +49 (0) 40 75103 375 sdb info@umco.de

E-mail address of person responsible for the SDS

1.4 Emergency telephone number

Emergency telephone num-: +44 1235 239670 (Carechem International)

ber

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 H226: Flammable liquid and vapour.

Skin irritation, Category 2 H315: Causes skin irritation.

Serious eye damage, Category 1 H318: Causes serious eye damage.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Specific target organ toxicity - repeated

exposure, Category 2

H373: May cause damage to organs through pro-

longed or repeated exposure.



 Bank Name
 Ort
 Kto-Nr.
 BLZ
 BIC
 IBAN
 Sitz/Registergericht Hamburg: HRA 42442

 Deutsche Bank
 Hamburg (600227300)
 200 700 0
 DEUTDEHHOXX
 DE58 2007 0000 0600 2273 00
 Persönlich hatfende Gesellschafterin:

 HypoVereinsbank
 Hamburg (59273300)
 200 300 00 HVVEDEMM300
 DE34 2003 0000 00959 2733 00
 DE34 2003 0000 00959 2733 00
 DE34 2003 0000 00959 2733 00
 Stezu Gebr Deteildgungs-GmbH

 Hostbank
 Hamburg (37305)
 200 100 20
 PBNKDEFF200
 DE85 2001 0020 0000 3732 05
 Stz/Registergericht Hamburg: HRB 17189 Geschlächterter.

 Michael C. Grau
 Michael C. Grau
 Michael C. Grau
 Michael C. Grau

ISO 9001



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Long-term (chronic) aquatic hazard, Category 3

H412: Harmful to aquatic life with long lasting ef-

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms









Signal word Danger

Hazard statements Flammable liquid and vapour. H226

> Causes skin irritation. H315

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H373 May cause damage to organs through prolonged or

repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Prevention: Precautionary statements

> P210 Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking. P260 Do not breathe mist or vapours.

P264 Wash skin thoroughly after handling.

Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection/ hearing protection.

Response:

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a

POISON CENTER/ doctor.

In case of fire: Use dry sand, dry chemical or P370 + P378

alcohol-resistant foam to extinguish.

Hazardous components which must be listed on the label:

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

xylene

butan-1-ol

Additional Labelling

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not

breathe spray or mist.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature Mixture of synthetic resins, organic solvents and pigments

Components

| Chemical name | CAS-No. EC-No. Index-No. Registration number | Classification | Concentration (% w/w) |
|---|---|--|--------------------------|
| reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) | 25068-38-6 500-033-5 603-074-00-8 01-2119456619-26 | Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 2; H411 specific concentration | >= 10 - < 20 |
| | | Specific concentration limit Eye Irrit. 2; H319 >= 5 % Skin Irrit. 2; H315 >= 5 % STOT RE 2; H319 >= 5 % Skin Irrit. 2; H315 >= 5 % | |
| xylene | 1330-20-7 215-535-7 601-022-00-9 01-2119488216-32 | Flam. Liq. 3; H226 Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Acute Tox. 4; H312 Acute Tox. 4; H315 Skin Irrit. 2; H315 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 (Respiratory system) STOT RE 2; H373 Asp. Tox. 1; H304 Aquatic Chronic 3; | >= 10 - < 20 |

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| | | H412 | |
|---------------------------------|---|--|--------------|
| n-butyl acetate | 123-86-4 204-658-1 607-025-00-1 01-2119485493-29 | Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) EUH066 | >= 10 - < 20 |
| 1-ethoxypropan-2-ol | 1569-02-4 216-374-5 603-177-00-8 | Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) | >= 1 - < 10 |
| butan-1-ol | 71-36-3 200-751-6 603-004-00-6 01-2119484630-38 | Flam. Liq. 3; H226 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H336 (Central nervous system) STOT SE 3; H335 (Respiratory system) | >= 3 - < 10 |
| ethylbenzene | 100-41-4 202-849-4 601-023-00-4 01-2119489370-35 | Flam. Liq. 2; H225 Acute Tox. 4; H332 STOT RE 2; H373 Asp. Tox. 1; H304 Aquatic Chronic 3; H412 | >= 1 - < 2.5 |
| Substances with a workplace exp | osure limit : | • | ' |
| titanium dioxide | 13463-67-7 236-675-5 01-2119489379-17 | | >= 10 - < 20 |

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice In all cases of doubt, or when sickness symptoms persist,

seek medica lattention.

Never give anything by mouth to an unconscious person.

If inhaled Remove to fresh air, keep patient warm and at rest.

> Irregular breathing/no breathing: artificial respiration. If unconscious place in recovery position and seek medical

advice.

In case of skin contact Take off all contaminated clothing immediately.

Wash skin thoroughly with soap and water or use recognised

skin cleanser.

Do NOT use solvents or thinners!

In case of eye contact Remove contact lenses, irrigate copiously with clean, fresh

water for at least 10 minutes, holding the eyelids apart and

seek medical advice.



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If swallowed Do NOT induce vomiting.

> If accidentally swallowed obtain immediate medical attention. Never give anything by mouth to an unconscious person.

Keep at rest.

4.2 Most important symptoms and effects, both acute and delayed

Risks Causes skin irritation.

> May cause an allergic skin reaction. Causes serious eye damage.

May cause damage to organs through prolonged or repeated

exposure.

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Alcohol resistant foam, CO2, powders

Unsuitable extinguishing

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Fire will produce dense black smoke. Exposure to decomposi-

tion products may cause a health hazard.

5.3 Advice for firefighters

Special protective equipment:

for firefighters

Appropriate breathing apparatus may be required.

Further information Cool endangered containers with water in case of fire.

DO NOT ALLOW RUN-OFF FROM FIRE FIGHTING TO

ENTER DRAINS OR WATER COURSES!!

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions Exclude sources of ignition and ventilate the area.

Do not inhale vapours.

Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions Do not let product enter drains.

> If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent Methods for cleaning up

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materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see chapter 13).

Clean preferably with a detergent; avoid use of solvents.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentrations higher than the occupational exposure limits.

Comply with the health and safety at work laws.

Smoking, eating and drinking should be prohibited in the application area.

Observe specific national regulations for handling and use of

paints.

Advice on protection against fire and explosion

The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Preparation may charge electrostatically: always use earthing leads whentransferring from one container to another. Operators should wear anti-static footwear and clothing. No sparking tools should be used. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Electrical equipment should be protected to the appropriate standard. Floors should be of the conducting type. Keep container tightly closed. Never use pressure to empty: container isnot a pressure vessel. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Further information on storage conditions

Always keep in containers of same material as the original one. See also instructions on the label. Avoid heating and direct sunlight. Keep container dry in a cool, well-ventilated

place.

Advice on common storage

Keep away from oxidizing agents and strongly acid or alkaline

materials.

Recommended storage tem: :

perature

5 - 35 °C

7.3 Specific end use(s)

Specific use(s) This information is not available.

Mankiewicz Gebr. & Co. (GmbH & Co. KG) Bank Name Georg-Wilhelm-Straße 189 21107 Hamburg (Wilhelmsburg) Tel.: +49 (0) 40 / 75 10 30 Fax: +49 (0) 40 / 75 10 33 75

 Bank Name
 Ort
 Kto-Nr.
 BLZ
 BIC
 IBAN
 Sizz
 Sizz/Registergericht Hamburg: HRA 42442

 Deutsche Bank
 Hamburg 600227300
 200 700 00
 DEUTSEHHOXX
 DE58 2007 0000 0600 2273 00
 Persönlich haftende Geseilschafterin: HypoVereinsbank

 HypoVereinsbank
 Hamburg 373205
 200 300 00
 HYVEDEMM300
 DE34 2003 0000 0059 2733 00
 Grau Gebr. Beteiligungs-GmbH

 Hybourgen Strate
 Hamburg 373205
 200 100 20
 PBNKDEFF200
 DE85 2001 0020 0000 3732 05
 Sitz/Registergericht Hamburg: HRB 17189
 Geschäftsführender Gesellschafter: Michael O. Grau

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis |
|------------------|--------------------------------|-------------------------------|--|------------------|
| titanium dioxide | 13463-67-7 | TWA (inhalable dust) | 10 mg/m3 | GB EH40 |
| | | TWA (Respirable dust) | 4 mg/m3 | GB EH40 |
| xylene | 1330-20-7 | TWA | 50 ppm 221 mg/m3 | 2000/39/EC |
| | Further inforn skin, Indicativ | e | possibility of significant uptal | |
| | | STEL | 100 ppm 442 mg/m3 | 2000/39/EC |
| | Further inforn skin, Indicativ | е | possibility of significant uptal | |
| | | TWA | 50 ppm 220 mg/m3 | GB EH40 |
| | | nose for which there | rbed through the skin. The as are concerns that dermal ab | |
| | | STEL | 100 ppm 441 mg/m3 | GB EH40 |
| | | nose for which there | rbed through the skin. The as are concerns that dermal ab | |
| n-butyl acetate | 123-86-4 | TWA | 150 ppm 724 mg/m3 | GB EH40 |
| | | STEL | 200 ppm 966 mg/m3 | GB EH40 |
| | | STEL | 150 ppm 723 mg/m3 | 2019/1831/E U |
| | Further inforn | nation: Indicative | | |
| | | TWA | 50 ppm 241 mg/m3 | 2019/1831/E U |
| | Further inforn | nation: Indicative | | |
| butan-1-ol | 71-36-3 | STEL | 50 ppm 154 mg/m3 | GB EH40 |
| | | nose for which there | rbed through the skin. The as are concerns that dermal ab | |
| ethylbenzene | 100-41-4 | TWA | 100 ppm 442 mg/m3 | 2000/39/EC |
| | Further inform skin, Indicativ | | possibility of significant uptal | ke through the |
| | | STEL | 200 ppm 884 mg/m3 | 2000/39/EC |
| | Further inforn skin, Indicativ | | possibility of significant uptal | ke through the |

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| | TWA | 100 ppm 441 mg/m3 | GB EH40 |
|--|---------------------|--|---------|
| | ose for which there | bed through the skin. The as are concerns that dermal abs | |
| | STEL | 125 ppm 552 mg/m3 | GB EH40 |
| | ose for which there | bed through the skin. The as are concerns that dermal abs | |

Biological occupational exposure limits

| Substance name | CAS-No. | Control parameters | Sampling time | Basis |
|----------------|-----------|---------------------|---------------|---------|
| xylene | 1330-20-7 | methyl hippuric | After shift | GB EH40 |
| - | | acid: 650 Millimo- | | BAT |
| | | les per mole Creat- | | |
| | | inine | | |
| | | (Urine) | | |

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

| Substance name | End Use | Exposure routes | Potential health effects | Value |
|-----------------|-----------|-----------------|------------------------------|-----------------------|
| xylene | Workers | Inhalation | Long-term systemic effects | 221 mg/m3 |
| | Workers | Dermal | Long-term systemic effects | 212 mg/kg bw/day |
| | Consumers | Inhalation | Long-term systemic effects | 65.3 mg/m3 |
| | Consumers | Dermal | Long-term systemic effects | 125 mg/kg bw/day |
| | Consumers | Oral | Long-term systemic effects | 12.5 mg/kg bw/day |
| n-butyl acetate | Workers | Inhalation | Long-term systemic effects | 300 mg/m3 |
| | Workers | Dermal | Long-term systemic effects | 11 mg/kg bw/day |
| | Consumers | Inhalation | Long-term systemic effects | 35.7 mg/m3 |
| | Consumers | Dermal | Long-term systemic effects | 6 mg/kg bw/day |
| | Consumers | Oral | Long-term systemic effects | 2 mg/kg bw/day |
| butan-1-ol | Workers | Inhalation | Long-term local ef- fects | 310 mg/m3 |
| | Consumers | Inhalation | Long-term systemic effects | 55.357 mg/m3 |
| | Consumers | Dermal | Long-term systemic effects | 3.125 mg/kg bw/day |
| | Consumers | Oral | Long-term systemic effects | 1.562 mg/kg bw/day |
| ethylbenzene | Workers | Inhalation | Long-term systemic effects | 77 mg/m3 |
| | Workers | Dermal | Long-term systemic effects | 180 mg/kg bw/day |

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| | Consumers | Inhalation | Long-term systemic effects | 15 mg/m3 |
|-----------------|-----------|------------|------------------------------|-----------------------|
| | Consumers | Oral | Long-term systemic effects | 1.6 mg/kg bw/day |
| xylene | Workers | Inhalation | Long-term systemic effects | 221 mg/m3 |
| | Workers | Dermal | Long-term systemic effects | 212 mg/kg bw/day |
| | Consumers | Inhalation | Long-term systemic effects | 65.3 mg/m3 |
| | Consumers | Dermal | Long-term systemic effects | 125 mg/kg bw/day |
| | Consumers | Oral | Long-term systemic effects | 12.5 mg/kg bw/day |
| n-butyl acetate | Workers | Inhalation | Long-term systemic effects | 300 mg/m3 |
| | Workers | Dermal | Long-term systemic effects | 11 mg/kg bw/day |
| | Consumers | Inhalation | Long-term systemic effects | 35.7 mg/m3 |
| | Consumers | Dermal | Long-term systemic effects | 6 mg/kg bw/day |
| | Consumers | Oral | Long-term systemic effects | 2 mg/kg bw/day |
| butan-1-ol | Workers | Inhalation | Long-term local ef- fects | 310 mg/m3 |
| | Consumers | Inhalation | Long-term systemic effects | 55.357 mg/m3 |
| | Consumers | Dermal | Long-term systemic effects | 3.125 mg/kg bw/day |
| | Consumers | Oral | Long-term systemic effects | 1.562 mg/kg bw/day |
| ethylbenzene | Workers | Inhalation | Long-term systemic effects | 77 mg/m3 |
| | Workers | Dermal | Long-term systemic effects | 180 mg/kg bw/day |
| | Consumers | Inhalation | Long-term systemic effects | 15 mg/m3 |
| | Consumers | Oral | Long-term systemic effects | 1.6 mg/kg bw/day |

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

| Substance name | Environmental Compartment | Value |
|-----------------|---------------------------|----------------------------------|
| xylene | Fresh water | 0.327 mg/l |
| | Marine water | 0.327 mg/l |
| | Fresh water sediment | 12.46 mg/kg dry weight (d.w.) |
| | Marine sediment | 12.46 mg/kg dry weight (d.w.) |
| | Sewage treatment plant | 6.58 mg/l |
| | Soil | 2.31 mg/kg dry weight (d.w.) |
| n-butyl acetate | Fresh water | 0.18 mg/l |
| | Marine water | 0.0018 mg/l |

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| | Fresh water sediment | 0.981 mg/kg dry weight (d.w.) |
|-----------------|------------------------|----------------------------------|
| | Marine sediment | 0.098 mg/kg dry weight (d.w.) |
| | Sewage treatment plant | 35.6 mg/l |
| | Soil | 0.09 mg/kg dry weight (d.w.) |
| butan-1-ol | Fresh water | 0.082 mg/l |
| | Marine water | 0.008 mg/l |
| | Fresh water sediment | 0.324 mg/kg dry |
| | | weight (d.w.) |
| | Marine sediment | 0.032 mg/kg dry weight (d.w.) |
| | Sewage treatment plant | 2476 mg/l |
| | Soil | 0.017 mg/kg dry weight (d.w.) |
| ethylbenzene | Fresh water | 0.1 mg/l |
| , | Marine water | 0.01 mg/l |
| | Fresh water sediment | 13.7 mg/kg dry |
| | | weight (d.w.) |
| | Marine sediment | 1.37 mg/kg dry weight (d.w.) |
| | Sewage treatment plant | 9.6 mg/l |
| | Soil | 2.68 mg/kg dry weight (d.w.) |
| xylene | Fresh water | 0.327 mg/l |
| , , , | Marine water | 0.327 mg/l |
| | Fresh water sediment | 12.46 mg/kg dry |
| | | weight (d.w.) |
| | Marine sediment | 12.46 mg/kg dry |
| | | weight (d.w.) |
| | Sewage treatment plant | 6.58 mg/l |
| | Soil | 2.31 mg/kg dry |
| | | weight (d.w.) |
| n-butyl acetate | Fresh water | 0.18 mg/l |
| | Marine water | 0.0018 mg/l |
| | Fresh water sediment | 0.981 mg/kg dry weight (d.w.) |
| | Marine sediment | 0.098 mg/kg dry weight (d.w.) |
| | Sewage treatment plant | 35.6 mg/l |
| | Soil | 0.09 mg/kg dry |
| | | weight (d.w.) |
| butan-1-ol | Fresh water | 0.082 mg/l |
| | Marine water | 0.008 mg/l |
| | Fresh water sediment | 0.324 mg/kg dry weight (d.w.) |
| | Marine sediment | 0.032 mg/kg dry weight (d.w.) |
| | Sewage treatment plant | 2476 mg/l |
| | Soil | 0.017 mg/kg dry |
| | | weight (d.w.) |
| ethylbenzene | Fresh water | 0.1 mg/l |

according to Regulation (EC) No. 1907/2006



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| Marine water | 0.01 mg/l |
|------------------------|---------------------------------|
| Fresh water sediment | 13.7 mg/kg dry weight (d.w.) |
| Marine sediment | 1.37 mg/kg dry weight (d.w.) |
| Sewage treatment plant | 9.6 mg/l |
| Soil | 2.68 mg/kg dry weight (d.w.) |

8.2 Exposure controls

Engineering measures

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain aerosol- and solvent vapours concentration below the OEL, suitable respiratory protection must be worn.

Personal protective equipment

Eye/face protection Wear safety goggles to protect against solvent splashes.

Hand protection

Remarks Adhere to the professional organisation rule "Use of protec-

tive gloves". Appropriate chemicals resistant glove tested in

compliance with EN 374.

Recommendation for protection against components general-

ly found in the products:

For short-term contact (i.e. splash protection):

Appropriate material: nitrile rubber, Neoprene

Material thickness: > 0,4 mm > 480 min Breakthrough time:

Before use, the protective glove should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Preventive hand protection (skin protection cream) recommended. Wash immediately contaminated skin. Design operations thus to avoid permanent use

of protective gloves.

Skin and body protection Depending on the probability of the occurrence of dangerous-

ly explosive atmospheres, adapted protective clothing must

be worn.

If the solvent concentration is above the air limit values, a Respiratory protection

breathing apparatus approved for this purpose must be worn

Use half-mask model with cartridge or air-fed.

Dry grinding, torch cutting and/or welding however can pro-

duce hazardous dust and/or vapour.

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If possible, machine employing a wet medium.

Where practicable, install exhaust hoods to improve capture of vapours and fumes and avoid exposition; otherwise wear res-

piratory protection equipment.

Protective measures Do not eat or drink during work - no smoking.

Avoid product contact with skin, eyes and clothing.

Avoid the inhalation of dust from sanding, particulates and spray mist arising from the application of this preparation. When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process until such time as the particulates and solvent vapour concentration has fallen below the

exposure limits.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state liquid

Colour according product name

Odour characteristic

Upper explosion limit 10 %(V)

Lower explosion limit 1 %(V)

Flash point 24 °C

Method: ISO 13736

Auto-ignition temperature > 400 °C

pΗ

No data available

Viscosity

Viscosity, kinematic $: > 21 \text{ mm}^2 \text{s}$

Flow time > 150 s

> Cross section: 4 mm Method: DIN 53211

> 100 s

Cross section: 6 mm Method: ISO 2431

Solubility(ies)

Water solubility insoluble

according to Regulation (EC) No. 1907/2006



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: ca. 100 hPa (50 °C) Vapour pressure

: ca. 1.48 g/cm3 (20 °C) Density

9.2 Other information

Miscibility with water immiscible

Solvent separation < 3%(V)

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions No dangerous reaction known under conditions of normal use.

There are no data available on the preparation itself.

10.4 Conditions to avoid

Conditions to avoid Stable under recommended storage and handling conditions

(See section 7).

10.5 Incompatible materials

Materials to avoid Keep away from oxidizing agents, strongly alkaline and

strongly acid materials in order to avoid exothermic reactions.

10.6 Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

SECTION 11: Toxicological information

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

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity Acute toxicity estimate: > 2,000 mg/kg

Method: Calculation method

Acute inhalation toxicity Acute toxicity estimate: > 20 mg/l

Exposure time: 4 h

Test atmosphere: vapour Method: Calculation method

according to Regulation (EC) No. 1907/2006



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Acute dermal toxicity Acute toxicity estimate: > 2,000 mg/kg

Method: Calculation method

Components:

xylene:

Acute oral toxicity LD50 Oral (Rat): 4,300 mg/kg

butan-1-ol:

LD50 (Rat): 790 mg/kg Acute oral toxicity

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Not classified based on available information.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment The substance/mixture does not contain components consid-

> ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

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Further information

Product:

Remarks : Exposure of vapour concentration in excess of the stated

OEL's may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue muscular weakness, drowsiness and in extrem cases, loss of con-

sciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in nonallergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and re-

versible damage.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : There are no data available on the preparation itself.

Components:

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

weight ≤ 700):

Toxicity to fish : LC50 (Fish): 1.3 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia (water flea)): 2.1 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: There are no data available on the preparation it-

self.

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: There are no data available on the preparation it-

self.

according to Regulation (EC) No. 1907/2006



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12.4 Mobility in soil

Product:

Mobility Remarks: There are no data available on the preparation it-

self.

12.5 Results of PBT and vPvB assessment

Product:

Assessment This substance/mixture contains no components considered

> to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological infor-

mation

There are no data available on the preparation itself.

The product should not be allowed to enter drains or water

courses.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Dispose of in accordance with local regulations.

Contaminated packaging Contaminated packaging should be emptied as far as possible

> and after appropriate cleansing may be taken for reuse. Packaging that cannot be cleaned should be disposed off in agreement with the regional waste disposal company.

SECTION 14: Transport information

14.1 UN number or ID number

according to Regulation (EC) No. 1907/2006



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 ADR
 : UN 1263

 IMDG
 : UN 1263

 IATA
 : UN 1263

14.2 UN proper shipping name

ADR : PAINT IMDG : PAINT IATA : PAINT

14.3 Transport hazard class(es)

Class Subsidiary risks

 ADR
 : 3

 IMDG
 : 3

 IATA
 : 3

14.4 Packing group

ADR

Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3
Tunnel restriction code : (D/E)

Remarks : If transported within the user's premises: To be transported

always in closed, upright and safe containers. Make sure that persons handling these containers are aware of the rules of

conduct in case of incident or spillage.

IMDG

Packing group : III
Labels : 3
EmS Code : F-E, S-E

IATA (Cargo)

Packing instruction (cargo : 366

aircraft)

Packing group : III

Labels : Flammable Liquids

IATA (Passenger)

Packing instruction (passen- : 355

ger aircraft)

Packing instruction (LQ) : Y344
Packing group : III

Labels : Flammable Liquids

14.5 Environmental hazards

ADR

Environmentally hazardous : no

IMDG

according to Regulation (EC) No. 1907/2006



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Marine pollutant no

14.6 Special precautions for user

Remarks ADR: Receptacles with less than 450 litres capacity, are not

subject to ADR (see ADR 2.2.3.1.5)

IMDG: Receptacles with less than 450 litres capacity, are not subject to the regulations of IMDG chapters 4.1, 5.2 and 6.1

(see IMDG 2.3.2.5)

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

Conditions of restriction for the following entries should be considered: Number on list 3

50-00-0 (Number on list 72, 28)

UK REACH List of substances subject to authorisation

(Annex XIV)

Not applicable

Volatile organic compounds

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 31.99 %, 473 g/l

VOC content excluding water

Other regulations:

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for the mixture.

SECTION 16: Other information

Full text of H-Statements

H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

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 Grau Gebr. Beteiligungs-GmbH

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 Geschlätsthrender Gesellschafter:
 Michael C. Grau



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H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage.

H319 Causes serious eye irritation.

Harmful if inhaled. H332

H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated

exposure.

H411 Toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects. H412

EUH066 Repeated exposure may cause skin dryness or cracking.

Full text of other abbreviations

Acute Tox. Acute toxicity

Aquatic Chronic Long-term (chronic) aquatic hazard

Asp. Tox. Aspiration hazard Eve Dam. Serious eve damage Eye Irrit. Eye irritation

Flam. Liq. Flammable liquids Skin Irrit. Skin irritation Skin Sens. Skin sensitisation

STOT RE Specific target organ toxicity - repeated exposure Specific target organ toxicity - single exposure STOT SE

2000/39/EC Europe. Commission Directive 2000/39/EC establishing a first

list of indicative occupational exposure limit values

Europe. Commission Directive 2019/1831/EU establishing a 2019/1831/EU

fifth list of indicative occupational exposure limit values

UK. EH40 WEL - Workplace Exposure Limits GB EH40 GB EH40 BAT UK. Biological monitoring guidance values

Limit Value - eight hours 2000/39/EC / TWA 2000/39/EC / STEL Short term exposure limit 2019/1831/EU / TWA Limit Value - eight hours Short term exposure limit 2019/1831/EU / STEL

Long-term exposure limit (8-hour TWA reference period) GB EH40 / TWA GB EH40 / STEL Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization;

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KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information

The information given in this material safety data sheet does not release the user from its duty of risk assessment and control in the work place defined in other health and safety law. Adhere to the national sanitary and occupational safety regulations when using this product.

This safety datasheet complies with the requirements of regulation (EC) No 1907/2006(2020/878).

Classification of the mixture:

Classification procedure:

| Flam. Liq. 3 | H226 | Based on product data or assessment |
|-------------------|------|-------------------------------------|
| Skin Irrit. 2 | H315 | Calculation method |
| Eye Dam. 1 | H318 | Calculation method |
| Skin Sens. 1 | H317 | Calculation method |
| STOT RE 2 | H373 | Calculation method |
| Aquatic Chronic 3 | H412 | Calculation method |

Department issuing safety data sheet

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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