1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifiers

- Article No. (manufacturer/supplier): 2890381 B / 2890385 B
- Arivatec KG
- Identification of the substance or mixture: Härter für 2-K EP-Farbe nachleuchtend (DIN Qualität)

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

- Relevant identified uses: coating material, solvent based, use acc. to technical data sheet

1.3. Details of the supplier of the safety data sheet

- supplier (manufacturer/importer/downstream user/distributor): Corroconsult GmbH
- Elstorfer Ring 70 D-21149 Hamburg
- Telephone: +49(0)40 /60911775
- Telefax: +49(0)40 /60911706
- Dept. responsible for information: laboratory
- E-mail (competent person): lab@wilckens.com

1.4. Emergency telephone number

- Emergency telephone number: +49 4124 606 140
- Only available during office hours.

2. Hazards identification

2.1. Classification of the substance or mixture

- Classification according to Directive 67/548/EEC or 1999/45/EC

This mixture is classified as hazardous according to 1999/45/EC.

- C, R34: Corrosive
- R43: May cause sensitization by skin contact.
- R52-53: Harmful to aquatic life. May cause long-term adverse effects in the aquatic environment.

2.2. Label elements

The product is classified and labelled according to EC directives or corresponding national laws.

Labelling (67/548/EEC or 1999/45/EC)

- C Corrosive

Hazard statements

- 34: Causes burns.
- 43: May cause sensitization by skin contact.
- 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Precautionary statements

- 24: Avoid contact with skin.
- 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
- 38: In case of insufficient ventilation, wear suitable respiratory equipment.
- 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 61: Avoid release to the environment. Refer to special instructions/safety data sheet.
- 23: Do not breathe vapour.

contains:

- 3-aminomethyl-3,5,5-trimethylcyclohexylamine
- 3[(6 aminotrimethylhexyl)amino]propionitril

Special provisions concerning the labelling of certain mixtures

n.a.

2.3. Other hazards

3. Composition / Information on ingredients
3.2. Mixtures

Product description / chemical characterization

Description: epoxycoat

Hazardous ingredients

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

<table>
<thead>
<tr>
<th>EC No.</th>
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<th>Wt %</th>
<th>Remark</th>
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<td>203-539-1</td>
<td>107-98-2</td>
<td>603-064-00-3</td>
<td>01-2119457435-35-XXXX</td>
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<td>2.5 &lt; 5</td>
<td></td>
<td></td>
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<tr>
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<td>300-511-1</td>
<td>93941-62-9</td>
<td>01-2119458049-33-XXXX</td>
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<tr>
<td>220-666-8</td>
<td>2855-13-2</td>
<td>612-067-00-9</td>
<td>01-2119458049-33-XXXX</td>
<td>3-aminoethyl-3,5,5-trimethylcyclohexylamine</td>
<td>2.5 &lt; 5</td>
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Classification according to Directive 67/548/EEC or 1999/45/EC

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Additional information

Full text of R-phrases: see section 16.

Full text of H-phrases: see section 16.

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.

After 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
Remove contaminated, saturated clothing immediately. 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.

After ingestion
If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. 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.

5. Firefighting measures
5.1. Extinguishing media
Suitable extinguishing media
alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)
Extinguishing media which must not be used for safety reasons:
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. Do not allow water used to extinguish fire to enter drains, ground or waterways. Treat runoff as hazardous. Cool closed containers that are near the source of the fire.

6. Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2. Environmental precautions
Do not allow to enter 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 chapter 13). Clean using cleansing agents. Do not use solvents.

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

7. Handling and storage
7.1. Precautions for safe handling
Advises on safe handling
Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to chapter 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.

Precautions against fire and explosion:
Vapours are heavier than air. Vapours form explosive mixtures with air.

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 (BetrSVO). 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 (BGR 132)”.

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. Protect from heat and direct sunlight. Store in a cool dry place. 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.

8. Exposure controls / Personal protection

8.1. Control parameters
1-methoxy-2-propanol
INDEX No. 603-064-00-3 / EC No. 203-539-1 / CAS No. 107-98-2
EG, TWA: 375 mg/m³; 100 ppm
EG, STEL: 568 mg/m³; 150 ppm
Naphtha (petroleum), hydrosulfurized heavy; Low boiling point hydrogen treated naphtha benzenecontent < 0,1%
REACH 01-2119458049-33
INDEX No. 649-330-00-2 / EC No. 265-185-4 / CAS No. 64742-82-1
EG, TWA: 100 mg/m³

Additional information
TWA : long-term occupational exposure limit value
STEL : short-term occupational exposure limit value
Ceiling : peak limitation

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.

Occupational exposure controls
Respiratory protection
If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Dand 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 (maximum wearing 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 DIN EN 374
Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

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

Protective clothing
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 chapter 7. No additional measures necessary.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties
Appearance:
Physical state liquid
Colour refer to label
10. Stability and reactivity

10.1. Reactivity
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to chapter 7.

10.2. Chemical stability

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
Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials

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

11. Toxicological information
No data on preparation itself available.

11.1. Information on toxicological effects
Acute toxicity
EPW 2 (DIN-Qualität) EPWXT 6719
oral, LD50, Rat:
Hydrocarbons, C9-C12, n-alkanes, iso-alkanes, cyclics, aromatics (2-25%)
oral, LD50, Rat: > 6500 mg/kg
dermal, LD50, Rabbit: > 3500 mg/kg
inhalative (Gases), LC50, Rat: > 14 ppmV (4 h)
Irritant and corrosive effects
Toxicological data are not available.
Sensitisation
Toxicological data are not available.
Specific target organ toxicity
Toxicological data are not available.
Aspiration hazard
Hydrocarbons, C9-C12, n-alkanes, iso-alkanes, cyclics, aromatics (2-25%)
Aspiration hazard
Practical experience/human evidence
Other observations:
Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane
and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, dizziness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. 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 preparation do not meet the criteria for classification as CMR category 1 or 2, according to 67/548/EEC.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified according to the toxicological dangers. See chapters 2 and 15 for details.

12. Ecological information

overall evaluation

There is no information available on the preparation itself.

Do not allow to enter into surface water or drains.

12.1. Toxicity

Toxicological data are not available.

12.2. Persistence and degradability

Toxicological data are not available.

12.3. Bioaccumulative potential

Toxicological data are not available.

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT assessment

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

12.6. Other adverse effects

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 EC directives 75/442/EEC and 91/689/EEC in the corresponding versions, 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

packaging

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

14. Transport information

14.1. UN number

2735

14.2. UN proper shipping name

Land transport (ADR/RID): Amines, liquid, corrosive, n.o.s. (Isophorondiamin)

Sea transport (IMDG): AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylenediamin)

Air transport (ICAO-TI / IATA-DGR): Amines, liquid, corrosive, n.o.s. (Polyoxypropylenediamin)

14.3. Transport hazard class(es)
14.4. Packing group

III

14.5. Environmental hazards

Land transport (ADR/RID) n.a.
Marine pollutant n.a.

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.

Advises on safe handling: see parts 6 - 8

Additional information

Land transport (ADR/RID) tunnel restriction code E
Sea transport (IMDG) EmS-No. F-A, S-B

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not applicable

15. Regulatory information

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

EU legislation

Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).
VOC-value (in g/L) ISO 11890-2: 141
VOC-value (in g/L) ASTM D-3960-1: 271

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).

Other regulations, restrictions and prohibition regulations

15.2. Chemical Safety Assessment

For the following substances of this preparation a chemical safety assessment has been carried out:

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<td>265-185-4</td>
<td>64742-82-1</td>
<td>Naphtha (petroleum), hydrosulfurized heavy; Low boiling point hydrogen treated naphtha benzenecontent &lt; 0,1% REACH</td>
<td>01-2119458049-33-XXXX</td>
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</table>

16. Other information

Relevant R- and H-phrases (Number and full text):

Flam. Liq. 3 / H226 flammable liquids Flammable liquid and vapour.
STOT SE 3 / H336 Specific target organ toxicity (single exposure) May cause drowsiness or dizziness.
Acute Tox. 3 / H301 Acute toxicity (oral) Toxic if swallowed.
Acute Tox. 1 / H330 Acute toxicity (inhalative) Fatal if inhaled.
Skin Corr. 1B / H314 skin corrosion/irritation Causes severe skin burns and eye damage.
Aquatic Chronic 2 / H411 Hazardous to the aquatic environment Toxic to aquatic life with long lasting effects.
Asp. Tox. 1 / H304 Aspiration hazard May be fatal if swallowed and enters airways.
Acute Tox. 4 / H312 Acute toxicity (dermal) Harmful in contact with skin.
Acute Tox. 4 / H302 Acute toxicity (oral) Harmful if swallowed.
Skin Sens. 1 / H317 respiratory or skin sensitisation May cause an allergic skin reaction.
Aquatic Chronic 3 / H412 Hazardous to the aquatic environment Harmful to aquatic life with long lasting effects.
Xn; R21/22 Harmful Harmful in contact with skin and if swallowed.
C; R34 Corrosive Causes burns.
R43 May cause sensitization by skin contact.

R52-53 Harmful to aquatic life. May cause long-term adverse effects in the aquatic environment.

R10 Flammable

R67 Vapours may cause drowsiness and dizziness.

Xn; R22 Harmful Harmful if swallowed.

Xn; R65 Harmful Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

N; R51-53 Dangerous for the environment Toxic to aquatic life. May cause long-term adverse effects in the aquatic environment.

Additional information

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 chapter 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. All information are related to the liquid medium in original delivery condition.