

Article No.: Print date: Version: 115-04 17.09.2014 1.1

115-04

FEYCOPOX - FRANKOPOX Härter 04 Revision date: 20.01.2014 Issue date: 20.01.2014

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

1.1. Product identifiers

Article No. (manufacturer/supplier) Identification of the substance or mixture

FEYCOPOX - FRANKOPOX Härter 04

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

Relevant identified uses: Hardener for 2 component epoxy resins or coatings

1.3. Details to the supplier providing the material safety data sheet

Producer:

FEYCOLOR GmbH

Maxhuettenstraße 6, 93055 Regensburg, Germany

Tel.: +49 (0) 941/ 60497-0 Fax.: +49 (0) 941/ 60497-30 info@feycolor.com www.feycolor.com

Office hours: Monday - Thursday: 08:00 - 12:00 and 13:00 - 16:00 Friday: 08:00 - 12:00

Department responsible for information:

Hazardous material management: sd@feycolor.com

SECTION 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.

R10 Xn; R20/21 Xi; R38

Harmful Irritant Flammable Harmful by inhalation and in contact with skin. Irritating to skin.

2.2. Label elements

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

×

Xn Harmful

Hazard statements

| 10 | Flammable |
|---------------------|---|
| 20/21 | Harmful by inhalation and in contact with skin. |
| 38 | Irritating to skin. |
| Precautionary state | ments |
| 26 | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| 36/37 | Wear suitable protective clothing and gloves. |
| 38 | In case of insufficient ventilation, wear suitable respiratory equipment. |
| 51 | Use only in well-ventilated areas. |
| 23 | Do not breathe vapour. |
| contains: | |
| | vulene miviture of icomore |

xylene, mixture of isomers

Special provisions concerning the labelling of certain mixtures

n.a.

2.3. Other hazards

SECTION 3: Composition / information on ingredients

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| 3.2. Mixtures | Version: | 1.1 | Issue date: 20.01.2014 |
|------------------------------|-----------------------------|----------------------|---|
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| FEYCOLOR [®] | Astista Na . | | |

Product description / chemical characterization

| Description | Preparation out of polyamide resin in | |
|-------------|---------------------------------------|--|
| | solvents | |

Hazardous ingredients

| EC No. | REACH No. | |
|--|---|----------------|
| CAS No. INDEX No. | Chemical name classification | Wt % Remark |
| 215-535-7 1330-20-7 601-022-00-9 | 01-2119488216-32 xylene Flam. Liq. 3 H226 / Acute Tox. 4 H332 / Acute Tox. 4 H312 / Skin Irrit. 2 H315 | 20 - 25 |
| 202-849-4 100-41-4 601-023-00-4 | ethylbenzene Flam. Liq. 2 H225 / Acute Tox. 4 H332 | 5 - 10 |

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

| EC No. | REACH No. | |
|--------------|----------------------------|---------|
| CAS No. | Chemical name | Wt % |
| INDEX No. | classification | Remark |
| 215-535-7 | 01-2119488216-32 | |
| 1330-20-7 | xylene, mixture of isomers | 20 - 25 |
| 601-022-00-9 | R10 / Xn; R20/21 / Xi; R38 | |
| 202-849-4 | | |
| 100-41-4 | ethylbenzene | 5 - 10 |
| 601-023-00-4 | F; R11 / Xn; R20 | |

Additional information

Full text of R-phrases: see section 16. Full text of H-phrases: 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.

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

IF IN EYES: 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. 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

SECTION 5: Firefighting measures

5.1. Extinguishing media

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



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Extinguishing media which must not be used for safety reasons: strong water jet

Version:

- 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. Special protective equipment for firefighters:

Provide a conveniently located respiratory protective device.

Additional information

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. Treat runoff as hazardous.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures 6.1.

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours. See protective measures under point 7 and 8.

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.

Methods and material for containment and cleaning up 6.3.

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).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices 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 (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 (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. 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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters



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Occupational exposure limit values:

xylene, mixture of isomers

INDEX No. 601-022-00-9 / EC No. 215-535-7 / CAS No. 1330-20-7

Version:

EN, TWA: 220 mg/m3; 50 ppm EN, STEL: 441 mg/m3; 100 ppm

ethylbenzene

INDEX No. 601-023-00-4 / EC No. 202-849-4 / CAS No. 100-41-4

EN, TWA: 441 mg/m3; 100 ppm EN, STEL: 552 mg/m3; 125 ppm

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: solventresistant Latex gloves

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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Appearance: | |
|----------------|--|
| Physical state | |
| Colour | |

| liquid |
|-----------------|
| see productname |

| Odour | typical | | | |
|------------------------------|---|---------------------|---------|--------|
| Safety relevant basis data | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Unit | Method | Remark |
| Flash point: | 2 | 4 °C | | |
| Ignition temperature in °C: | 43 | 0°C | | |
| lower explosion limit: | 1. | 0 Vol-% | | |
| Upper explosion limit: | 7 | 8 Vol-% | | |
| Vapour pressure at 20 °C: | 1,6 | 8 mbar | | |
| Density at 20 °C: | 0,9 | 5 g/cm ³ | | |
| Water solubility (g/L): | insolub | e | | |
| pH value at 20 °C: | n.a | a. Wt % | | |
| Viscosity at °C: | ca. 75 - 125 cPa | IS | | |
| Solvent separation test (%): | < | 3 % | ADR/RID | |
| Solid content (%): | 7 | 0 Wt % | | |
| solvent content: | | | | |

| EEVCOLOR [®] | | | | |
|--|--|--|---|--|
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| Organic solvents: Water: | | , | | |
| Other information | | | | |
| SECTION 10: Stability a | nd reactivity | | | |
| Reactivity | | | | |
| Stable when applying the rechapter 7. | - | gulations for storage | and handling. Further information on correct st | orage: refer to |
| Keep away from strong acid | | and strong oxidizing | agents to avoid exothermic reactions. | |
| Stable when applying the re | | | | orage: refer to |
| Incompatible materials | | | | |
| - | • | form with exposure t | o high temperatures, e.g.: carbon dioxide, carb | oon monoxide, |
| SECTION 11: Toxicolog | ical information | on | | |
| No data on preparation itsel | f available. | | | |
| - | al effects | | | |
| • | | | | |
| | | | | |
| | | | | |
| | vallable. | | | |
| | voilable | | | |
| - | | | | |
| | - | | | |
| 8 | valiable. | | | |
| • | vailable | | | |
| - | | ty and toxicity for r | enroduction) | |
| | | ty and toxicity for f | | |
| | | | | |
| Other observations: Inhaling of solvent compone and respiratory organs, as v headache, dizziness, fatigue aforementioned effects throw natural fat from the skin resp | ents above the M vell as damage t e, amyosthenia, o ugh skin resorpti ulting in non-alle | o the liver, kidneys a dizziness, in serious on. Repeated or pro | nd the central nerve system. Indications for this cases: unconsciousness. Solvents may cause onged contact with the preparation may cause | are: some of the removal of |
| Overall Assessment on Cl | MR properties | | | |
| The ingredients in this prepa 67/548/EEC. | aration do not me | eet the criteria for cla | ssification as CMR category 1 or 2. according t | 0 |
| method of the Dangerous | Preparations D | | | |
| | Water: Other information SECTION 10: Stability a Reactivity Chemical stability Stable when applying the re- chapter 7. Possibility of hazardous re- keep away from strong acid Conditions to avoid Stable when applying the re- chapter 7. Hazardous decor Incompatible materials Hazardous decomposition Hazardous decomposition Hazardous decomposition Smoke, nitrogen oxides. SECTION 11: Toxicologic No data on preparation itsel Information on toxicological Acute toxicity Toxicological data are not a Irritant and corrosive effect Toxicological data are not a Sensitisation Toxicological data are not a Specific target organ toxic Toxicological data are not a Specific target organ toxic Toxicological data are not a Aspiration hazard Toxicological data are not a CMR effects (carcinogenic Toxicological data are not a Practical experience/huma Other observations: Inhaling of solvent compone and respiratory organs, as v headache, dizziness, fatigud aforementioned effects thro natural fat from the skin res irritation and reversible dam Overall Assessment on CI The ingredients in this prepa 67/548/EEC. There is no information ava method of the Dangerous | Article No.: Print date: Version: Article No.: Print date: Version: Products Article No.: Print date: Print and corrosive effects Article No.: Print and corrosive effects Article Conflict arget organ toxicity Toxicological data are not available. Article No.: Print date: Print and corrosive effects Article Arget organ toxicity Toxicological data are not available. Argenation hazard Toxicological data are not available. Argenation hazard Toxicological data are not available. Arget effects (carcinogenicity, mutagenicit Toxicological data are not available. Argenation hazard Toxicological data are not available. Arget effects (carcinogenicity, mutagenicit Toxicological data are not available. Arget effects (carcinogenicity, mutagenicit Toxicological data are not available. Arget effects (carcinogenicity, mutagenicit And respiratory organs, as well as damage in aforementioned effects through skin resorptin atural fat from the skin resulting in non-alle irritation and reversible damage. Averall Assessment on CMR properties The ingredients in this preparation do not me Arget Print | Article No.: 115-04 Print date: 17.09.2014 Version: Organic solvents: 30,00 V Water: 0,00 V Other information 30,00 V SECTION 10: Stability and reactivity 0,00 V Chemical stability Stable when applying the recommended regulations for storage ichapter 7. Possibility of hazardous reactions Keep away from strong acids, strong bases and strong oxidizing Conditions to avoid Stable when applying the recommended regulations for storage ichapter 7. Hazardous decomposition byproducts may form with exposure to smoke, nitrogen oxides. Hazardous decomposition byproducts may form with exposure to smoke, nitrogen oxides. SECTION 11: Toxicological information No data on preparation itself available. Inframation on toxicological effects Acute toxicity Toxicological data are not available. Specific target organ toxicity Toxicological data are not available. Specific target organ toxicity Toxicological data are not available. CMR effects (carcinogenicity, mutagenicity and toxicity for reform toxicological data are not available. Marcinal stability Toxicological data are not available. Motiological data are not available. CMR effects (carcinogenicity, mutagenicity and toxicity for reform toxicological data are not available. | Price No:: 115-04 brint date: EEVCOPOX - FRANKOPOX Haner 04 lissue date: 20.01.2014 Organic solvents:: 30,00 Wt % water: 0,00 Wt % water: Organic solvents:: 30,00 Wt % water: 0,00 Wt % Other information Stability and reactivity Reactivity Chemical stability Stable when applying the recommended regulations for storage and handling. Further information on correct storage the mapplying the recommended regulations for storage and handling. Further information on correct storage regulations for storage and handling. Further information on correct storage in an applying the recommended regulations for storage and handling. Further information on correct storage, and use composition byproducts may form with exposure to high temperatures. Incompatible materials Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carb storage, and on preparation itself available. Information No data on preparation itself available. Information Stocological affects Acute toxicity Toxicological affects Acute toxicity Toxicological data are not available. Specific target organ toxicity Toxicological data are not available. Appriorin hazard |

SECTION 12: Ecological information

overall evaluation

There is no information available on the preparation itself . Do not allow to enter into surface water or drains.



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12.1. Toxicity

No information available.

Long-term Ecotoxicity

Toxicological data are not available.

- 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 assessment

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

12.6. Other adverse effects

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 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

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.

SECTION 14: Transport information

.

14.1. UN number

440 100

1866

| 14.2. | UN proper shipping name | |
|-------|-------------------------------------|-----------------------|
| | Land transport (ADR/RID): | Resin solution |
| | Sea transport (IMDG): | RESIN SOLUTION |
| | Air transport (ICAO-TI / IATA-DGR): | Resin solution |
| 14.3. | Transport hazard class(es) | |
| | | 3 |
| 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. Advices on safe handling: see parts 6 - 8

Additional information

Land transport (ADR/RID)

tunnel restriction code



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Sea transport (IMDG)

EmS-No.

F-E, S-E

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Version:

not applicable

SECTION 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: | 285 | | | |
| VOC-value (in g/L) ASTM D 2369: | 285 | | | |

according to EU-regulation 2004/42/EC (appendix II)

EU limit value for this product (cat. nicht anwendbar): 0 g/l (2007)/0 g/l (2010). This product contains max 285 g/l VOC.

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 juvenils according to the "juvenile work protection guideline" (94/33/EC).

Other regulations, restrictions and prohibition regulations

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this preparation were not carried out.

SECTION 16: Other information

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

| ittere vante it and it prilao | | |
|-------------------------------|-----------------------------|---|
| Flam. Liq. 3 / H226 | flammable liquids | Flammable liquid and vapour. |
| Acute Tox. 4 / H332 | Acute toxicity (inhalative) | Harmful if inhaled. |
| Acute Tox. 4 / H312 | Acute toxicity (dermal) | Harmful in contact with skin. |
| Skin Irrit. 2 / H315 | skin corrosion/irritation | Causes skin irritation. |
| Flam. Liq. 2 / H225 | flammable liquids | Highly flammable liquid and vapour. |
| R10 | | Flammable |
| Xn; R20/21 | Harmful | Harmful by inhalation and in contact with skin. |
| Xi; R38 | Irritant | Irritating to skin. |
| F; R11 | Highly flammable | Highly flammable |
| Xn; R20 | Harmful | Harmful by inhalation. |
| | | |

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.