according to Regulation (EC) No. 1907/2006 (REACH)

according to Regulation (EU) 2015/830

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

product identifiers

Article No. (manufacturer/supplier) 641000

Trade name/designation Special Polyester Lacquer

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

Relevant identified uses:

Polyester mastic

Uses advised against:

Do not use for products which come into contact with the food stuffs.

Details of the supplier of the safety data sheet 1.3.

Manufacturer/supplier

Heinrich König & Co.KG

An der Rosenhelle 5 Telephone: +49 6101 5360 0 D-61138 Niederdorfelden Telefax: +49 6101 5360 11

Dept. responsible for information:

Telephone: +49 6101 5360 71 Laboratory Only available during office hours: Mon - Thurs 08:00 to 16:00

Friday 08:00 - 12:30

E-mail (competent person) SDB@heinrich-koenig.de

Emergency telephone number 1.4.

> Emergency CONTACT (24-Hour-Number): GBK Emergency telephone number

GmbH +49 (0)6132-84463

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].

Flammable liquids Flam. Liq. 3 / H226 Flammable liquid and vapour. Skin Irrit. 2 / H315 Skin corrosion/irritation Causes skin irritation. Eye Irrit. 2 / H319 Serious eye damage/eye irritation Causes serious eye irritation.

Reproductive toxicity Suspected of damaging the unborn child. Repr. 2 / H361d STOT RE 1 / H372 STOT-repeated exposure Causes damage to organs through prolonged

or repeated exposure.

2.2. Label elements

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

Hazard pictograms







Danger

Hazard statements

H226 Flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eve irritation.

H361d Suspected of damaging the unborn child.

Causes damage to organs through prolonged or repeated exposure. H372

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260 Do not breathe vapour.

P280 Wear protective gloves and eye/face protection.

P370 + P378 In case of fire: Use foam to extinguish.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Hazard components for labelling

Styrene

Supplemental Hazard information (EU)

according to Regulation (EC) No. 1907/2006 (REACH)

according to Regulation (EU) 2015/830

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No further relevant information available.

2.3 Other hazards

Mixtures

3.2.

No information available.

SECTION 3: Composition / information on ingredients

Description 2-Component filler

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

EC No. **REACH No.** CAS No. Designation Wt % INDEX No. classification // Remark 202-851-5 01-2119457861-32-xxxx 100-42-5 Styrene 20 < 25601-026-00-0

Flam. Lig. 3 H226 / Repr. 2 H361d / Acute Tox. 4 H332 / STOT RE 1

H372 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

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.

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.

Most important symptoms and effects, both acute and delayed

In all cases of doubt, or when symptoms persist, seek medical advice.

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

Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

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

according to Regulation (EC) No. 1907/2006 (REACH)

according to Regulation (EU) 2015/830

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Keep away from sources of ignition. 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 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 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.

Further information

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 (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:

Styrene

INDEX No. 601-026-00-0 / EC No. 202-851-5 / CAS No. 100-42-5

TWA: 430 mg/m3; 100 ppm STEL: 1080 mg/m3; 250 ppm

Additional information

TWA : long-term occupational exposure limit value STEL : short-term occupational exposure limit value

Ceiling: peak limitation

DNEL:

Styrene

INDEX No. 601-026-00-0 / EC No. 202-851-5 / CAS No. 100-42-5

DNEL short-term oral (acute), Workers: 306 mg/kg

according to Regulation (EC) No. 1907/2006 (REACH)

according to Regulation (EU) 2015/830

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DNEL long-term dermal (systemic), Workers: 406 mg/kg DNEL acute inhalative (local), Workers: 289 mg/m³ DNEL acute inhalative (systemic), Workers: 289 mg/m³ DNEL long-term inhalative (systemic). Workers: 85 mg/m³ DNEL long-term oral (repeated). Consumer: 2.1 mg/kg DNEL long-term dermal (systemic), Consumer: 343 mg/kg DNEL acute inhalative (local), Consumer: 174,25 mg/m³ DNEL long-term inhalative (systemic), Consumer: 10,2 mg/m³

PNEC:

Styrene

INDEX No. 601-026-00-0 / EC No. 202-851-5 / CAS No. 100-42-5

PNEC aquatic, freshwater: 0,028 mg/l PNEC aquatic, marine water: 0.014 mg/l PNEC aquatic, intermittent release: 0,04 mg/l PNEC sediment, freshwater: 0,614 mg/kg PNEC sediment, marine water: 0,307 mg/kg

PNEC, soil: 0,2 mg/kg

PNEC sewage treatment plant (STP): 5 mg/l

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. 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. Suitable respiratory protection apparatus: A

Hand protection

For prolonged or repeated handling the following glove material must be used: FKM (fluoro 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 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

Information on basic physical and chemical properties

Appearance:

Physical state: Liquid Colour: colourless Odour: characteristic not determined **Odour threshold:**

pH at 20 °C: N.A. Melting point/freezing point: n.a.

Initial boiling point and boiling range: not determined

Flash point: 34 °C

Method: calculated.

according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2015/830

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Evaporation rate: not determined

flammability

Burning time (s): not determined

Upper/lower flammability or explosive limits:

Lower explosion limit:

Upper explosion limit:

vapour pressure at 20 °C:

not determined

not determined

not determined

not determined

Relative density:

Density at 20 °C: 1,11 g/cm³

Method: calculated.

Solubility(ies):

Water solubility (g/L) at 20 °C: insoluble

Partition coefficient: n-octanol/water: see section 12

Auto-ignition temperature: not determined

Decomposition temperature: not determined

Viscosity at 40 °C: > 20,5 mm²/s

Explosive properties: not determined

Oxidising properties: not determined

9.2. Other information

Solid content (%): 100,00 Wt %

solvent content:

Organic solvents: 0 Wt % Water: 0 Wt %

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

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

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

11.1. Information on toxicological effects

Acute toxicity

Styrene

oral, LD50, Rat: 2650 mg/kg

inhalative (vapours), LC50, Rat: 12 mg/l (4 h)

Harmful if inhaled.

Skin corrosion/irritation; Serious eye damage/eye irritation

Causes skin irritation.

according to Regulation (EC) No. 1907/2006 (REACH)

according to Regulation (EU) 2015/830

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Causes serious eye irritation.

Styrene

Skin (4 h)

Prolonged or repeated contact with the preparation can lead to irritations of mucous membranes and of skin such as redness, formation of blebs, dermatitis, etc..; Irritating to skin.

Irritation

Respiratory or skin sensitisation

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

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Suspected of damaging the unborn child.

Styrene

Reproductive toxicity

Suspected of damaging the unborn child.

STOT-single exposure; STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Styrene

Specific target organ toxicity (repeated exposure)

Causes damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

Aspiration hazard

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

Practical experience/human evidence

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, drowsiness, 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 mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

SECTION 12: Ecological information

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

Do not allow to enter into surface water or drains.

12.1. Toxicity

Styrene

Fish toxicity, LC50, Lepomis macrochirus (Bluegill): 25 mg/l (96 h)

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 4,7 mg/l (48 h)

Fish toxicity, LC50, Pimephales promelas (fathead minnow): 32 mg/l (96 h)

Algae toxicity, IC50:, Pseudokirchneriella subcapitata: 0,72 mg/l (96 h)

Based on available data the classification criteria are not met.

12.2. Persistence and degradability

Styrene

Biodegradation, OECD 301D/ EEC 92/69/V, C.4-E: 80 % (20 D)

Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential

Styrene

Partition coefficient: n-octanol/water: 2,95 - 3,16

Method: OECD 107

Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.

12.4. Mobility in soil

Styrene

according to Regulation (EC) No. 1907/2006 (REACH)

according to Regulation (EU) 2015/830

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No information 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. 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

14.1. UN number

UN 1866

14.2. UN proper shipping name

Land transport (ADR/RID):

Sea transport (IMDG):

Air transport (ICAO-TI / IATA-DGR):

Resin solution

Resin solution

14.3. Transport hazard class(es)

3

14.4. Packing group

Ш

14.5. Environmental hazards

Land transport (ADR/RID) No further relevant information available.

Marine pollutant No further relevant information available.

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 D/E

Sea transport (IMDG)

EmS-No. F-E, S-E

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

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

VOC-value (in g/L): 0,000

National regulations

Restrictions of occupation

according to Regulation (EC) No. 1907/2006 (REACH)

according to Regulation (EU) 2015/830

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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).

15.2. Chemical Safety Assessment

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

EC No.	Designation	REACH No.
CAS No.		
202-851-5	Styrene	01-2119457861-32-xxxx
100-42-5		

SECTION 16: Other information

Full text of classification in section 3

Flam. Liq. 3 / H226 Flammable liquids Flammable liquid and vapour.

Repr. 2 / H361d Reproductive toxicity Suspected of damaging the unborn child.

Acute Tox. 4 / H332 Acute toxicity (inhalative) Harmful if inhaled.

STOT RE 1 / H372 STOT-repeated exposure Causes damage to organs (or state all organs

> affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of

exposure cause the hazard).

Skin Irrit. 2 / H315 Causes skin irritation. Skin corrosion/irritation Eye Irrit. 2 / H319 Serious eye damage/eye irritation Causes serious eye irritation.

Classification procedure

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

Flam. Liq. 3 Flammable liquids On basis of test data. Skin corrosion/irritation Calculation method. Skin Irrit. 2 Eye Irrit. 2 Serious eye damage/eye irritation Calculation method. Repr. 2 Reproductive toxicity Calculation method. STOT RE 1 STOT-repeated exposure Calculation method.

Abbreviations and acronyms

European Agreement concerning the International Carriage of Dangerous Goods by Road ADR

OEL Occupational Exposure Limit Value

Biological Limit Value BLV CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging **CMR** Carcinogenic, Mutagenic and Reprotoxic

German Institute for Standardization / German industrial standard DIN

Derived No-Effect Level **DNEL**

EAKV European Waste Catalogue Directive

Effective Concentration EC EC **European Community** ΕN 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

IMDG Code International Maritime Code for Dangerous Goods ISO International Organization for Standardization

Lethal Concentration LC

LD Lethal Dose

MARPOL Maritime Pollution: The International Convention for the Prevention of Pollution from Ships

OECD Organisation for Economic Cooperation and Development

persistent, bioaccumulative, toxic **PBT 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]

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2015/830

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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.

Polyester resin multi-component systems

For polyester resin multi-component systems (base + hardener) the UN number 3269 has to be used according to GGVS/ADR and IMDG code.

* Data changed compared with the previous version