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# **Material Safety Data Sheet** According to 91/155 EC

Printing date 25.03.2002

Reviewed on 21.12.2001

# 1 Identification of the substance/preparation and of the company/undertaking

· Product details

Trade name: HARDENER PASTE

· Manufacturer/Supplier: DREVE-OTOPLASTIK GMBH

Max-Planck-Straße 31 59423 Unna / Germany Tel.: ++49 2303 / 8807-0 Fax.: ++49 2303 / 82909

· Further information obtainable from:

Department Research & Development

Tel.: ++49 2303 / 8807-14/-17

Information in case of emergency: ++49 2303 / 8807-0

# 2 Composition/information on ingredients

- Chemical characterization
- · Description: Mixture of substances listed below with nonhazardous additions.

	components: tetrakis (2-butoxyethoxy) silane	<b>X</b> Xi; R 38	10-25%
	trimethoxyvinylsilane	<b>X</b> Xn; R 20	10-25%
7631-86-9	silicon dioxide, chemically prepared		2.5-10%
AND NUMBER	dibutyltin dilaurate	E C; R 22-34	2.5-10%
	di-n-butyl tin compound	Xn; R 21/22-36/38-48-52/53	≤ 2.5%

#### 3 Hazards identification

· Hazard description:



Xi Irritant

- · Information concerning particular hazards for human and environment: R 36/38 Irritating to eyes and skin.
- · Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

#### 4 First-aid measures

After inhalation:

In case of unconsciousness place patient stably in side position for transportation. Seek medical treatment in case of complaints.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing: If symptoms persist consult doctor.

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# 5 Fire-fighting measures

Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: Water with full jet

· Special hazards caused by the substance, its products of combustion or resulting gases: Under certain fire conditions, traces of other toxic gases cannot be excluded.

· Protective equipment: No special measures required.

#### 6 Accidental release measures

· Person-related safety precautions: Avoid contact with skin and eyes.

· Measures for environmental protection: Do not allow to enter sewers/ surface or ground water.

· Measures for cleaning/collecting:

Pick up mechanically.

Dispose of the material collected according to regulations.

# 7 Handling and storage

- · Handling:
- · Information for safe handling: Avoid contact with skin and eyes.
- · Information about fire and explosion protection: No special measures required.
- · Storage:
- · Requirements to be met by storerooms and receptacles: Keep container tightly sealed.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
- Store in cool, dry conditions in well sealed receptacles.
- · Class according to regulation on flammable liquids: Void

# 8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:

8002-74-2 Paraffin waxes and Hydrocarbon waxes

OES Short-term value: 6 mg/m3 Long-term value: 2 mg/m3

77-58-7 dibutyltin dilaurate

OES Short-term value: 0.2 mg/m3

Long-term value: 0.1 mg/m<sup>3</sup>

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- · Additional information: The lists valid during the making were used as basis.
- Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- Respiratory protection: Not required.
- Protection of hands:



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· Eye protection: Safety glasses

· Body protection: Protective work clothing

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#### 9 Physical and chemical properties · Form: Pasty · Colour: Various colours · Odour: Weak, characteristic · Change in condition Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined. · Flash point: > 90°C · Ignition temperature: > 200°C · Self-igniting: Product is not selfigniting. · Danger of explosion: Product does not present an explosion hazard. · Vapour pressure at 20°C: < 1 hPa · Density at 20°C: 0.92 g/cm3 · Solubility in / Miscibility with water: Insoluble.

# 10 Stability and reactivity

- · Thermal decomposition / conditions to be avoided:
  - No decomposition if used according to specifications.
- · Dangerous reactions No dangerous reactions known.
- · Dangerous decomposition products: No dangerous decomposition products known.

# 11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Irritant,

#### 12 Ecological information

· General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

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#### 13 Disposal considerations

- · Product:
- Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

#### 14 Transport information

- · Maritime transport IMDG:
- · Marine pollutant: Yes

### 15 Regulatory information

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:



Xi Irritant

Risk phrases:

36/38 Irritating to eyes and skin.

· Safety phrases:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 36/37 Wear suitable protective clothing and gloves.

- · National regulations:
- · Classification according to VbF: Void
- · Technical instructions (air):

Class	Share in %
11	< 2,5

· Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.

#### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing MSDS: Department Research & Development
- · Contact: Dr. Thomas Veit, Dr. Reiner Altmann