

Material Safety Data Sheet

According to 91/155 EEC

Printing date 29.03.2006

Reviewed on 12.07.2005



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

- **Product details**
- **Trade name:** Exaktosil C hardener paste
- **Article number:** 540 0109 B
- **Application of the substance / the preparation** kneading silicone for matrixes / hardener paste
- **Manufacturer/Supplier:**
Bredent
Weißenhörner Straße 2
D-89250 Senden
Tel.: +49 (0) 7309/872-0
Fax: +49 (0) 7309/872-24
- **Further information obtainable from:** R & D
- **Information in case of emergency:** Tel.: +49 (0) 6132-84436 (24 h)

2 Composition/information on ingredients

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

- **Dangerous components:**

CAS: 1067-33-0 EINECS: 213-928-8	dibutyltin di(acetate)	 T; R 25-36/38	10-25%
CAS: 112-18-5 EINECS: 203-943-8	dodecyldimethylamine	 Xn; R 22	1-5%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- **Hazard description:**



Xn Harmful

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 10 Flammable.

R 22 Harmful if swallowed.

- **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

- **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Call for a doctor immediately.

GB

(Contd. on page 2)

Material Safety Data Sheet

According to 91/155 EEC

Printing date 29.03.2006

Reviewed on 12.07.2005

Trade name: Exaktosil C hardener paste

(Contd. of page 1)

5 Fire-fighting measures

- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents

7 Handling and storage

- **Handling:**
- **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.

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:**

1067-33-0 dibutyltin di(acetate)

OES	Short-term value: 0.2 mg/m ³ Long-term value: 0.1 mg/m ³ Sk; as Sn
-----	--

- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
- **Respiratory protection:**
Not necessary if room is well-ventilated.
Use suitable respiratory protective device when high concentrations are present.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 3)

GB

Material Safety Data Sheet

According to 91/155 EEC

Printing date 29.03.2006

Reviewed on 12.07.2005

Trade name: Exaktosil C hardener paste

(Contd. of page 2)

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

- **General Information**

Form:	Pasty
Colour:	Green
Odour:	Pungent

- **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 142°C

- **Flash point:** 46°C

- **Ignition temperature:** 260°C

- **Self-igniting:** Product is not selfigniting.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- **Density at 20°C:** 1.34 g/cm³

- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.

- **Solvent content:**
- Organic solvents:** 0.0 %

- **Solids content:** 25.0 %

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:**

- **LD/LC50 values relevant for classification:**

1067-33-0 dibutyltin di(acetate)

Oral	LD50	32 mg/kg (rat)
Dermal	LD50	2318 mg/kg (rabbit)

(Contd. on page 4)

GB

Material Safety Data Sheet

According to 91/155 EEC

Printing date 29.03.2006

Reviewed on 12.07.2005

Trade name: Exaktosil C hardener paste

(Contd. of page 3)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No 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:
Harmful

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.

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

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids.
- **Danger code (Kemler):** 36
- **UN-Number:** 1992
- **Packaging group:** III
- **Hazard label:** 3+6.1
- **Description of goods:** 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (Poly(diethoxysiloxane), dibutyltin di(acetate))

- **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1992
- **Label:** 3+6.1
- **Packaging group:** III
- **EMS Number:** F-E,S-D
- **Marine pollutant:** Yes

(Contd. on page 5)

GB

Material Safety Data Sheet

According to 91/155 EEC

Printing date 29.03.2006

Reviewed on 12.07.2005

Trade name: Exaktosil C hardener paste

(Contd. of page 4)

· **Proper shipping name:** FLAMMABLE LIQUID, TOXIC, N.O.S. (Poly(diethoxysiloxane), dibutyltin di(acetate))

· **Air transport ICAO-TI and IATA-DGR:**



· **ICAO/IATA Class:** 3
 · **UN/ID Number:** 1992
 · **Label:** 3+6.1
 · **Packaging group:** III
 · **Proper shipping name:** FLAMMABLE LIQUID, TOXIC, N.O.S. (Poly(diethoxysiloxane), dibutyltin di(acetate))

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:**
Xn Harmful
- **Hazard-determining components of labelling:**
dibutyltin di(acetate)
- **Risk phrases:**
10 Flammable.
22 Harmful if swallowed.
- **Safety phrases:**
7 Keep container tightly closed.
20 When using do not eat or drink.
23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
60 This material and its container must be disposed of as hazardous waste.

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.

- **Relevant R-phrases**
22 Harmful if swallowed.
25 Toxic if swallowed.
36/38 Irritating to eyes and skin.
- **Department issuing MSDS:** R & D
- **Contact:** R & D

GB