

**DREVE-OTOPLASTIK GMBH**

ER.D003.

**Material Safety Data Sheet according to 91/155/EEC****OTOFORM-KC**

(OTOFORM K2)

Printing date: 08.03.1996, revised on: 21.08.1995

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**1. Material / Contents and Company Identification***Indications concerning product*

Product name: OTOFORM-KC  
 Producer: DREVE-OTOPLASTIK GmbH, 59423 Unna, Germany  
 Tel.: 02303/88 07 0; Fax: 02303/82 90 9  
 Emergency Telephone no.: 02303/88 07 0  
 Contact person: Dr. Volker Drevc

**2. Composition / Indications concerning Components**

*Chemical features:* Hydroxyl-polydimethyl-siloxane with fillers, auxiliaries, not vulcanised.  
*Dangerous Contents:* inapplicable

**3. Potential Dangers**

*Special dangers for human beings and environment:* inapplicable

**4. First Aid Measures**

*General advice:* inapplicable  
*After inhalation:* no special measures necessary  
*After skin contact:* rinse with a lot of water or soap and water  
*After eye contact:* rinse immediately with a lot of water, when irritation lasts, consult a physician  
*After swallowing:* cause vomiting  
*Information for the physician:* inapplicable

**5. Fire Fighting Measures**

*Adequate means:* Water, extinguishing powder, sand, carbon dioxide  
*Inadequate means for safety measures:* inapplicable  
*Special dangers caused by the product, the production itself, its combustion products or resulting gases:* inapplicable  
*Special protection equipment for fire fighting:* use a breathing apparatus not depending on circulating air

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**6. Measures to be taken in Case of Accidental Release**

<i>Precautionary measures related to persons:</i>	no special measures necessary
<i>Environmental protection measures:</i>	see local authorities' regulations
<i>Procedures for cleaning / collection:</i>	collect mechanically and dispose acc. to regulations
<i>Additional advice:</i>	inapplicable

**7. Handling and Storage**

<i>Advice for safe handling:</i>	no special measures necessary
<i>Advice for fire and explosion protection:</i>	no special measures necessary
<i>Storage:</i>	keep container firmly shut

**8. Exposure Control and Personal Protection Equipments**

<i>Additional advice for the arrangement of technical appliances:</i>	inapplicable
<i>Components with work-place related limiting values to be observed:</i>	none
<i>Personal protection equipment:</i>	none
<i>General protection and hygiene measures:</i>	no special hygiene measures necessary
<i>Breathing protection:</i>	not necessary
<i>Hand protection:</i>	not necessary
<i>Eye protection:</i>	not necessary
<i>Body protection:</i>	not necessary

**9. Physical and Chemical Features**

<i>Form:</i>	paste
<i>Colour:</i>	diverse
<i>Odour:</i>	odourless

*Safety-related data:*

		<i>Method:</i>
Change of condition:		
Blazing temperature:	> 250° C	DIN 51376
<i>Inflammation:</i>		
Inflammation temperature:	450° C	DIN 51794
Self-inflammation:	inapplicable	
Explosion danger:	inapplicable	
Explosion limits:	inapplicable	at °C g/l H2O
Vapour pressure:	inapplicable	at 20° C hPa
Density:	0,97 - 1,3 g/ml	at hPa DIN 53479
Solubility in water:	practically not soluble	
pH-value:	neutral	

*Repartition coefficient*

n-Oktanöl/water log POW: inapplicable

Viscosity:	diverse
Solvent separation check:	inapplicable
Contents of solvents:	inapplicable
Thermal decomposition:	> 250° C

### 10. Stability and Reactivity

No dangerous reactions known in case of adequate storage and handling.

*Conditions to be avoided:* none

*Materials to be avoided:* none

*Dangerous decomposition products:* none

### 11. Toxicological Information

*General:* According to today's knowledge physiologically tolerable. According to our current knowledge neither mutagen, carcinogenic nor teratogenic.

*Acute toxicity:* No data known.

### 12. Ecological Information

*Advice for elimination (persistence and biodegradability):* Not biodegradable.

*Reaction in environmental compartments:* No data known.

*Ecotoxicological effects:* According to previous experience no fish toxicity to be expected.

*Reaction in sewage plants*

*(bacteria toxicity: inhalation and reproduction inhibition):* No data known.

*Further ecological information:*

Not water-soluble in vulcanised condition. Filtration enables separation from water.

### 13. Indications for Disposal

*Recommendations:* disposal acc. to regulations through incineration in a plant for special wastes. Smaller quantities can be eliminated in a household waste incineration plant. Local authorities' regulations have to be observed.

*Waste key number:* 57202

*Contaminated packaging:* not applicable

### 14. Transport Information

*Land transport ADR/RID and GGVS/GGVE:*

*GGVS/GGVE class:* no dangerous product

*ADR/RID class:* no dangerous product

*Warning sign No.:* Material No.:

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**14. Transport Information***Express:* admitted*Shipping symbols:**Post Germany:* admitted*Inland vessel transport ADN/ADNR:**Remarks:**Sea vessel transport IMDG/GGVSea:**IMDG/GGVSea class:* no dangerous product*EmS-No.:* MFAG:*Marine pollutant:* no*Remarks:**Shipping symbols:* none*Air transport ICAO-TI and IATA-DGR:**IACO/IATA class:* no dangerous product*Remarks:**Shipping symbols:**Packaging regulations:* PAC: Max.net.:

CAO: Max.net.:

*Airmail:* admitted**15. Regulations***Marks according to EEC directions:* none*R sets:* none*S sets:* none**16. Other Information**

These indications only describe the safety requirements of the product(s) and are based on today's knowledge. They do not represent any assurance of features of the described product(s) in the sense of legal warranty regulations.

*Unna, March 1996***DREVE-OTOPLASTIK GMBH**

**DREVE-OTOPLASTIK GMBH**  
**Material Safety Data Sheet according to 91/155/EEC**  
**Hardenerpaste**

Printing date: 27.05.1997, revised on: 27.05.1997, Rev. 1

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**1. Material / contents and company identification**

*Indications concerning product:*

Product name: HARDENER PASTE  
Producer: DREVE-OTOPLASTIK GMBH,  
Max-Planck-Str. 31, 59423 Unna/Germany  
Tel.: 0 23 03/88 07 0; Fax: 0 23 03/82 90 9  
Emergency telephone no.: 0 23 03/88 07 0  
Contact person: Dr. Volker Dreve

**2. Composition / indications concerning components:**

Mixture of organic tin compound, silicic acid ester, organic filler and colorant

<u>CAS-Nr.:</u>	<u>Contains:</u>	<u>Percentage:</u>	<u>danger symbol:</u>	<u>R-sets:</u>
77-58-7	Dibutylzinndilaurat	10	-	-

**3. Potential dangers**

none

**4. First aid measures**

*Inhalation:* --  
*After skin contact:* Wash with plenty of water and soap.  
*After eye contact:* Thoroughly rinse with plenty of water, seek medical advice.  
*After swallowing:* Seek medical advice.

**5. Fire fighting measures**

*Suitable extinguishing media:* Water fog, foam, CO<sub>2</sub>

**6. Accidental release measures**

*Environmental precautions:* --  
*Methods for cleaning-up:* --

**7. Handling and storage**

*Handling:* Hold container tightly closed.  
*Precautions against fire and explosion:*

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**8. Exposure control and personal protection equipments**

*Substances with specific control parameters such as limit values:*

MAK-value: not applicable

*Industrial hygiene:* Do not inhale the vapours. Remove any contaminated, soaked clothing immediately.  
Employ the standard procedures when handling chemicals.

*Hand protection:* Wear suitable gloves (rubber gloves)

*Eye protection:* Wear protective glasses

*Respiratory protection:* Respiratory protection for organic fumes

**9. Physical and chemical features**

Form: paste  
Colour: vaseline-like  
Odour: virtually odourless.

Setting point

Boiling point

Flash point: abt. 30 °C

Ignition temperature: abt. 350 °C

Explosion limits: Upper: Lower:

Vapour pressure (20 °C): abt. 1 mbar

Density (20 °C): abt. 1,0 g/cm<sup>3</sup> DIN 51757

Solubility in water (20 °C): insoluble

pH value (at g/l water) ( °C): neutral

Viscosity (20 °C)

Further information:

**10. Stability and reactivity:**

*Stability:*

*Hazardous decomposition products:*

No hazardous decomposition products when handled and stored correctly.

*Hazardous reactions:*

Vapours may form combustible mixtures with air, even in emptied, uncleaned containers.

*Materials to avoid:*

Reacts with water, acids, alkaline solutions, amines.

Easily combustible vapour/air mixtures may form during use.

**11. Toxicological information**

LD 50 rat: > 5000 mg/kg acc. to OECD-guideline 401, Febr. '87

Dermal: Test for primary skin irritation (rabbit), acc. to OECD-guideline 404 + EEC guideline 84/449: not irritant

Eye: Test for eye irritation (rabbit), acc. to OECD-guideline 504 + EEC-guideline 84/449: not irritant

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**12. Ecological information**

*Toxicity to fishes:*

*Toxicity to daphnia:*

In our experience, when used correctly, this hardener paste will not cause any malfunctioning of sewage works.  
Avoid the material getting into lakes, rivers, sewerage systems or soil.

**13. Disposal considerations**

Decontamination according to local regulations, burn in appropriate equipment or discard in suitable dump.

**14. Transport information**

*GGVE/GGVS/RID/ADR:*

Class: 4.1

Number: 6 C

Hazard no. 40

Substance no. 1325

Description of goods: Flammable solid, organic, n.o.s. (Dibutylzinndilaurat)

*ADNR:*

Class: 4.1

Number: 1325

Category:

Description of goods: Flammable solid, organic, n.o.s. (Dibutylzinndilaurat)

*GGVSee/IMDG-Code:*

Class: 4.1

UN-No. 1325

PG: III

EMS-No.:

MFAG:

Correct technical name: Flammable solid, organic, n.o.s. (Dibutylzinndilaurat)

*IACO/IATA-DGR:* 785

Class:

UN/ID-No.:

PG: II

Correct technical name: Flammable solid, organic, n.o.s. (Dibutylzinndilaurat)

Store away from all foodstuff.

**15. Regulatory information**

Identification according to EEC directives

Danger symbol:

EEC/R-phrases (information on danger):

EEC/S-phrases (safety advice)

*National regulations (D):*

Regulatory requirements (VO, dated 1980-07-29) regarding marking and identification, do not apply.

Class of hazard acc. to VbF:

not applicable

*Water hazardous product, class:* 2 - pollutes water (self-assessment)

**16. Other information**

The above information is based on our present-day knowledge and experience. It does not represent a guarantee for the properties of the product.

Unna, May 1997

DREVE-OTOPLASTIK GMBH