

Safety Data Sheet

according to 91/155/EEC

1. Product identification/preparation / company undertaking		
Trade name:	K-CATALYST	
Manufacturer/supplier:	S&C Polymer GmbH, D-25335 Elmshorn	
Emergency information:	Dr. Jürgen Engelbrecht ++49 4121 483-0	
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Australian Supplier:	Ultimate Dental Supplies 660A South Rd Moorabbin Vic 3192 03 9532 1799 info@ultimatedental.com.au	
Emergency information:	13 11 21 Poisons Hotline (24 hours / 7 Days)	
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2. <u>Composition Ingredients</u>	Solution of dibutyl-tin dilaureate and red dye in tetraethyl silicate based on a viscuos paste.	
Description:		
Hazardous components:		
<u>CAS-Nr.:</u>	<u>Name</u>	<u>R-classification</u>
78-10-4	tetraethyl silicate	10-20-36/37
77-58-7	dibutyl tin dilaureate	20-36/37
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3. <u>Hazards identification</u>		
Risk identification:		
Special risks for human beings and environment:	Flammable paste, harmful by inhalation, irritating to eyes and respiratory system.	
Classification:	Classification corresponds to actual EEC guidelines, however completed with details from technical literature and company data.	

4. First-aid measures**General information****after skin contact:**

Wash off with plenty of water. Remove contaminating clothing.

after eye contact:

Rinse out with plenty of water with the eyelid held wide open. Call an ophthalmologist.

after inhalation:

Fresh air. Consult doctor if feeling unwell.

after swallowing:

Make victim drink plenty of water. Consult doctor if feeling unwell.

5. Fire fighting measures**Extinguishing media:**

Powder, foam, CO₂.

Product is combustible and forms explosive mixtures with air at elevated temperatures.

Vapours are heavier than air.

Protective equipment:

Selfcontaining breathing apparatus necessary in case of larger amount of product.

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6. Accidental release measures

Personal precautions:	Do not inhale vapours/aerosols
Environmental precautions:	
Methods for cleaning up:	Take up with liquid absorbent material. Forward for disposal. Clean up affected area.
Additional information:	

7. Handling and storage

Handling:	Take measures to prevent electrostatic charge.
Handling procedures:	
Recommendation for fire and explosion protection:	
storage:	
Requirements at storerooms and containers:	Tightly closed. Store in a well ventilated place. Keep away from sources of ignition and heat. Unsuitable working materials / container materials: various plastics, rubber.
Requirements for storage with other products:	Avoid contact with water, strong acids, strong bases, strong oxidizing agents, alkali metals, and alkaline earth metals
Additional storage conditions:	Store at 15-25 °C.
Storage classification:	
VBF-classification:	

8. Exposure controls/personal protection

Additional information for technical plants:

Components with limits of values to be supervised at the workplace:

CAS-Nr.	Name	art	value	unit
-----	organic tin compounds	TRGS 900	0.1	mg/m ³
78-10-4	tetraethyl silicate	TRGS 900	170	mg/m ³
		or	20	ml/m ³

Additional information:

Personal protective equipment: Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

General measures of protection and hygiene:

respiration:	Required when vapours/aerosols are generated
hands:	Required
eyes:	Required

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9. Physical and chemical properties			
Appearance			
Form:	Paste		
Colour:	Red		
Odour:	Like esters		
	<u>Value</u>	<u>Unit</u>	<u>Method</u>
Information on change in the physical state)* tetraethyl silicate			
Melting point/melting range)*:	-77	°C	
Boiling point/boiling range)*:	169	°C	
Flash point)*:	21	°C	
Autoignition temperature)*:	345	°C	
Danger of explosion)*:	Lower limit:	1.3 Vol%	
	Upper limit:	23.0 Vol%	
Density (20°C):	1.058	g/cm ³	
Vapour pressure)*:	< 100	mbar	
Viskosity:	Pasteous consistency		
pH:	Not available		
Solubility in/miscibility with:	Soluble in ethanol		
Water:	Insoluble, decomposition; see point 10		
Content of solvents:			
Organic solvents:	None		
Water:	None		
Content of solids:	None		
10. Stability and reactivity			
Incompatibility with other substances:	Avoid heating. Water, acids, bases (decomposition of tetraethylsilicate under evaluation of ethanol), strong oxidizing agents, alkali metals, and alkaline earth metals		
Hazardous decomposition products:	None if correctly stored. But moist air causes decomposition under evaluation of ethanol		
11. Toxicological information			
Acute toxicity:	LD ₅₀ oral, rat male: 6270 mg/kg LCLo inhalation rat : 1000 ppm(V)/4h		
Primary irritation:			
Skin:	Irritating.		
Eye:	Irritation with danger of serious eye damage.		
Ingestion:	Irritation symptoms of mucous membranes in the mouth, pharyngs, oesophagus and gastro-intestinal tract. After swallowing of large amounts: tiredness, narcosis.		
Inhalation:	Irritation symptoms in the respiratory tract.		
Sensitization of product:	Not observed.		
Additional toxikological information:	During the long period of use - even as catalyst paste for hardening polysiloxane impression materials of condensation curing type according recommendations for use - no health deseases are reported.		

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12. <u>Ecological information</u>	
General information:	Using proper handling product causes no environmental problems. Do not allow to enter waters, waste water, or soil.
Classification of water endangerment:	Product is not soluble in aqueous media; After reaction with water harmful effect on aquatic organisms. For decomposition products: WGK = 1 (slightly polluting substance)
13. <u>Disposal consideration</u>	
Product:	
Recommendation:	Use proper landfill disposal or incineration in accordance with local, state and federal regulations.
Uncleaned packaging:	Disposal in compliance with official regulations. Handle contaminated packages in the same way as the substance itself. If not officially specified differently, noncontaminated packaging may be treated like household waste or recycled.
14. <u>Transport information</u>	
Land transport ADR/RID (Germany)	ADR/RID: UN 1292 TETRAETHYLSILICAT, 3, III
Sea transport IMDG	IMDG-code: UN 1292 TETRAETHYL SILICATE, 3, III Ems F-E S-D
Air transport CAO/PAX	CAO/PAX: TETRAETHYL SILICATE,3, UN 1292, II
	The transport regulations are cited according to international regulations and in the form applicable in Germany. Possible national deviations in other countries are not considered.
15. <u>Regulatory information</u>	
Classification according to EEC-guidelines:	F Flammable X _n Harmful R 10 Flammable R 20 Harmful by inhalation R 36/37 Irritating to eyes and respiratory system S-phrases: None
16. <u>Other information:</u>	
Preparation by:	The above information is based on our present day knowledge and relates solely to the safety requirements of the product. The data do not signify any warranty with regards to products properties. However users of the product should satisfy themselves that the information given is sufficient and correct for their specific circumstances of use. Dr. Jürgen Engelbrecht, Tel.: ++49/4121/483-0