

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION



Great Lakes Orthodontics
200 Cooper Ave
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CHEMTREC: 800-424-9300

Product Name: Lab Putty Catalyst
Product Number: 100-076 Kit – 100-075

Effective Date: 9/8/14

SECTION 2. HAZARDOUS IDENTIFICATION

Potential Health Effects:

Primary Routes of Entry

- Inhalation
- Eye Contact
- Skin Contact
- Inhalation
- Ingestion

Human Effects and Symptoms of Overexposure:

Eye

Causes serious eye irritation with danger of serious eye damage.

Skin

Prolonged contact may cause redness and irritation.

Inhalation

Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness.

Ingestion

Irritation symptoms of mucous membranes in the mouth, pharynx, esophagus, and gastrointestinal tract. After swallowing of large amounts: tiredness, narcosis.

Carcinogenicity

No carcinogenic substances as defined by IARC, NTP and / or OSHA.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Hazardous Components</u>	<u>CAS #</u>	<u>Weight - %</u>	
Tetraethyl Silicate	Proprietary	Proprietary	
<u>ACGIH TLV</u>	<u>OSHA PEL</u>		<u>NIOSH IDLH</u>
TWA: 10ppm	TWA: 100ppm		IDLH: 700ppm
	TWA: 850 mg/m ³		TWA: 10 ppm
	(Vacated) TWA: 10 ppm		TWA: 85 mg/m ³
	(Vacated) TWA: 85 mg/m ³		

<u>Hazardous Components</u>	<u>CAS #</u>	<u>Weight - %</u>	
Dibutyltin Dilaureate	77-58-7	Proprietary	
<u>ACGIH TLV</u>	<u>OSHA PEL</u>		<u>NIOSH IDLH</u>
STEL: 0.2 mg/m ³	TWA: 0.1 mg/m ³ Sn		IDLH: 25 mg/m ³ Sn
TWA: 0.1 mg/m ³ Sn	(vacated) TWA: 0.1 mg/m ³ Sn		TWA: 0.1 mg/m ³ except
	S*		Cyhexatin Sn

SECTION 4. FIRST AID MEASURES

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing if eye irritation persists. If symptoms persist, call a physician.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation

Remove to fresh air. Consult doctor if feeling unwell.

Ingestion

Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person. Induce vomiting, but only if victim is fully conscious. Call Poison Center or doctor/physician if you feel unwell.

SECTION 5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Powder, Foam, Carbon Dioxide (CO₂)

Special Fire Fighting Procedures

As in any fire, wear self-contained breathing apparatus pressure-demand. MSHA/NIOSH (approved or equivalent) and full protective gear.

Unusual Fire / Explosion Hazards

Forms explosive mixtures with air at elevated temperatures. Vapors are heavier than air and may spread along floors. Take precautionary measures against static discharge.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Spill and Leak Procedures

Clean up with liquid absorbent material, forward for disposal. Clean up affected area.

SECTION 7. HANDLING & STORAGE

Handling

Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink, or smoke when handling this product. Avoid breathing vapors or mists. Use only in well-ventilated areas. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Ground all equipment to prevent buildup of static charge. Use explosion proof equipment. Take precautionary measures against static discharge.

Storage Precautions

Tightly closed. Store in well-ventilated place. Keep away from sources of ignition and heat. Store locked up.

Further Info on Storage Conditions

Store at 15 – 25 °C (59 – 77 °F). Store away from incompatible materials.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Industrial Hygiene

Do not eat, drink, or smoke when using this product.

Ventilation Measures

None.

Respiratory Protection

Required when vapors / aerosols are generated.

Skin and Body Protection

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.

Additional Protective Measures

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.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

- **Form** – Paste
- **Color** – Red
- **Odor** – Like esters
- **PH** – Not Applicable
- **Flash Point** - 21 °C / 69.8 °F
- **Boiling Point** – 169 °C / 336.2 °F
- **Melting Point** - -77 °C / -106.6 °F
- **Lower Flammability Limit** – 1.3 %
- **Upper Flammability Limit** – 23.0 %
- **Vapor Pressure** – < 100 @ 20 °C (68 °F)
- **Vapor Density** - mbar
- **Solubility in Other Solvents**– Insoluble in water
- **Decomposition Temperature** – 345 °C / 653 °F
- **Density (20 °C)** – 1.058 g/cm³ @ 20 °C (68 °F)

Not determined: Evaporation Rate, Relative Density, Water Solubility, Partition Coefficient, Auto-ignition Temperature, Kinematic Viscosity, Dynamic Viscosity, Explosive Properties, oxidizing Properties.

SECTION 10. STABILITY & REACTIVITY

Hazardous Reactions – Hazardous polymerization will not occur under normal processing.

Stability – Stable under recommended storage conditions.

Materials to Avoid – Water, strong acids, strong bases, strong oxidizing agents, alkali metals, and alkaline earth metals.

Conditions to Avoid – Avoid heating. Unsuitable working materials / container materials: various plastics, rubber.

Hazardous Decomposition Products – None if correctly stored. But moist air causes decomposition under evaluation of ethanol.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

Tetraethyl Silicate:

- LD50: 6,270 mg/kg (Rat, Male)

Dibutyltin Dilaurate

- LD50: 175 mg/kg (Rat)

Acute Dermal toxicity

Tetraethyl Silicate:

- LD50: 6,300 µL/kg (Rabbit)

Acute inhalation toxicity

- LC50: 1,000 ppm (V) / 4h

SECTION 12. ECOLOGICAL INFORMATION (non-mandatory)

Exotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Acute and Prolonged Toxicity to Fish

- Dibutyltin Dilaurate LC50 – 2: 48h *Oryzias Latipes* mg/L

Not determined: Persistence and Degradability, Bioaccumulation, Mobility

Other Adverse Effects: 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).

SECTION 13. DISPOSAL CONSIDERATIONS (non-mandatory)

Waste Disposal Method

Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Disposal in compliance with official regulations. Handle contaminated packages in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

SECTION 14. TRANSPORT INFORMATION (non-mandatory)

DOT UN/ID

NO – UN1325

Proper Shipping Name – Flammable solid, organic, n.o.s. (Tetraethyl Silicate)

Hazard Class – 4.1

Packing Group – II

IATA UN/ID

NO – UN1325

Proper Shipping Name – Flammable solid, organic, n.o.s. (Tetraethyl Silicate)

Hazard Class – 4.1

Packing Group – II

IMDG UN/ID

NO – UN1325

Proper Shipping Name – Flammable solid, organic, n.o.s. (Tetraethyl Silicate)

Hazard Class – 4.1

Packing Group – II

SECTION 15. REGULATORY INFORMATION (non-mandatory)

International Inventories – Not determined

SARA 313 – Not determined

US State Regulations:

US State Right-to-Know Regulations

- NJ
- MA
- PA

SECTION 16. OTHER INFORMATION (non-mandatory)

HMIS Rating: Not determined

NFPA Rating: Not determined