

Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 05/30/2005

Reviewed on 05/24/2005

1 Identification of substance:

· **Product details:**

· **Trade name:** Activator Universal Optosil-Xantopren Paste

· **Application of the substance / the preparation** Activator for dental impression material

· **Manufacturer/Supplier:**

Heraeus Kulzer GmbH
Grüner Weg 11, D-63450 Hanau

Tel.: 0800 4372522

· **Information department:**

Dr. Barbara Bräu
Tel.: +49 2133 51-8521 / Fax: +49 2133 51-5016
e-mail: barbara.braeu@heraeus.com

· **Emergency information:** Call +49 30 19240 (24 hours).

2 Composition/Data on components:

· **Chemical characterization**

· **Description:** -

· **Dangerous components:**

77-58-7	dibutyltin dilaurate	Xn; R 20/21/22-36/38-52/53	10-25%
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· **Additional information** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

· **Hazard description:** not applicable

· **Information pertaining to particular dangers for man 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.

· **Classification system**

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

· **NFPA ratings for USA (scale 0-4)**



· **HMIS-Ratings (Scale 0-4)**



4 First aid measures

· **After inhalation** Supply fresh air.

· **After skin contact** Generally the product does not irritate the skin.

· **After eye contact**

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

· **After swallowing** Induce vomiting and seek advice of physician.

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5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards caused by the material, its products of combustion or resulting gases:**
Formation of toxic gases is possible during heating or in case of fire.
- **Protective equipment:** Mount respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:**
Absorb with liquid binding material (diatomite, universal binders, for small amounts tissues).
Dispose contaminated material as waste according to item 13.
- **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Handling**
 - **Information for safe handling:**
Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
 - **Information about protection against explosions and fires:** No special measures required.
- **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:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
 - **Additional information:** The lists that were valid during the creation 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.
 - **Breathing equipment:**
Not necessary with efficient local exhaust. If exposition to vapours is possible, use breathing protective mask (filter A).
 - **Protection of hands:** Not required.
 - **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.
 - **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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- **For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:**
Butyl rubber, BR
Nitrile rubber, NBR
- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**
PVC or PE gloves
- **Eye protection:** Protective goggles are recommended.
- **Body protection:** Light weight protective clothing

9 Physical and chemical properties:

· General Information

- **Form:** Pasty
- **Color:** Red
- **Odor:** Aromatic

· Change in condition

- **Melting point/Melting range:** undetermined
- **Boiling point/Boiling range:** 110°C (230°F)

· **Flash point:** 88°C (190°F) (DIN 51755)

· **Ignition temperature:** 370.0°C (698°F) (DIN 51794)

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density at 20°C (68°F):** 1.100 g/cm³

· Solubility in / Miscibility with

- **Water:** Not miscible or difficult to mix

· Solvent content:

- **Organic solvents:** 0.9 %

· **Solids content:** 43.1 %

10 Stability and reactivity

- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** none

11 Toxicological information

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

Oral	LD50	4100 mg/kg (rat)
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· 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 is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

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When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information:

- **General notes:**
Water hazard class 2 (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** Smaller quantities can be disposed of with household waste.
- **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.
- **Land transport ADR/RID (cross-border)**
 - **ADR/RID class:** -
- **Maritime transport IMDG:**
 - **IMDG Class:** -
 - **Marine pollutant:** Yes

15 Regulations

· SARA Section 355 (extremely hazardous substances)		
None of the ingredients is listed.		
· SARA Section 313 (specific toxic chemical listings)		
None of the ingredients is listed.		
· TSCA (Toxic Substances Control Act)		
77-58-7	dibutyltin dilaurate	
7631-86-9	silicon dioxide, chemically prepared	
	Ethanol	
78-10-4	tetraethyl orthosilicate	
1320-06-5	C. I. Solvent Red 27	
· Prop 65 - Chemicals known to cause cancer		
None of the ingredients is listed.		
· Prop 65 - Chemicals known to cause reproductive toxicity		
None of the ingredients is listed.		
· Carcinogeny categories		
· EPA (Environmental Protection Agency)		
None of the ingredients is listed.		
· IARC (International Agency for Research on Cancer)		
7631-86-9	silicon dioxide, chemically prepared	3
· NTP (National Toxicology Program)		
None of the ingredients is listed.		
· TLV (Threshold Limit Value established by ACGIH)		
77-58-7	dibutyltin dilaurate	A4

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Ethanol	A4
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· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Markings according to EU guidelines:**

Observe the general safety regulations when handling chemicals

The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EU" as issued in the latest valid version.

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (GefStoffV).

· **National regulations**

· **Technical instructions (air):**

Class	Share in %
III	< 1

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

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant R-phrases**

20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

36/38 Irritating to eyes and skin.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

· **Department issuing MSDS:** Safety department

· **Contact:** Dr. Tuchscherer Tel.: +49 6081 959-287

· * **Data compared to the previous version altered.**

USA