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# Material Safety Data Sheet acc. to ISO 11014

Version number 4

Reviewed on 04/15/2015

# Printing date 05/18/2015

1 Identification	
· Product identifier	
· Trade name: IPS e.max CAD Crystall./Glaze Liquid	
<ul> <li>CAS Number: 107-88-0</li> <li>EC number: 203-529-7</li> <li>Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.</li> <li>Application of the substance / the mixture Auxiliary for manufacture of dental prothesis</li> </ul>	
<ul> <li>Details of the supplier of the safety data sheet</li> <li>Manufacturer/Supplier: Ivoclar Vivadent Inc.</li> <li>175 Pineview Drive, Amherst, N.Y. 14228 USA</li> <li>Tel. +1 800 533 6825 Fax +1 716 691 2285</li> </ul>	
Ivoclar Vivadent Inc. 1-6600 Dixie Road Mississauga, Ontario L5T 2Y2 Canada Phone: +1 905 670 8499 Fax: +1 905 670 3102	
<ul> <li>Information department: Quality Assurance / Regulatory Affairs</li> <li>Emergency telephone number: 24 Hour Emergency Assistance: Emergency-Call USA - Infotrac: 1-800-535-5053 Emergency-Call Canada - Canutec: 1-613-996-6666</li> </ul>	
General SDS Assistance: US: 1-800-533-6825 Canada: 1-800-263-8182	
2 Hazard(s) identification	
• <i>Classification of the substance or mixture</i> The substance is not classified according to the Globally Harmonized System (GHS).	
• Label elements • GHS label elements Void	
<ul> <li>Hazard pictograms Void</li> <li>Signal word Void</li> <li>Hazard statements Void</li> <li>Classification system:</li> <li>NFPA ratings (scale 0 - 4)</li> </ul>	
$\begin{array}{c} \textbf{Health} = 0\\ Fire = 1\\ Reactivity = 0 \end{array}$	
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· HMIS-ratings (scale 0 - 4)



· Other hazards

· Results of PBT and vPvB assessment

- · **PBT:** Not applicable.
- · vPvB: Not applicable.

#### 3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description
- 107-88-0 butane-1,3-diol
- · Identification number(s)
- EC number: 203-529-7

#### 4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact:
- Rinse with water.
- 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:
- Rinse out mouth and then drink plenty of water.
- If symptoms persist consult doctor.
- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

#### **5** *Fire-fighting measures*

- · Extinguishing media
- · Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

#### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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• **Reference to other sections** See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

## 7 Handling and storage

· Handling:

- **Precautions for safe handling** Only adequately trained personnel should handle this product. For use in dentistry only.
- Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:
- This product is hygroscopic.
- Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

#### 8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see item 7.

- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.

#### · Exposure controls

- · Personal protective equipment:
- General protective and hygienic measures: Usual hygienic measures for dental practice. Wash hands before breaks and at the end of work. Keep away from foodstuffs, beverages and feed.
- **Breathing equipment:** Not required.
- 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

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

• Eye protection: Safety glasses

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Information on basic physical and	chemical properties
General Information	
Appearance:	
Form:	Fluid
Color:	Colorless
Odor:	Odorless
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	-50 °C
Boiling point/Boiling range:	207 °C
Flash point:	109 °C
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	375 °C
Auto igniting:	Not determined.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not determined.
Density at 20 °C:	1 g/cm <sup>3</sup>
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/wat	t <b>er):</b> Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
• Other information	No further relevant information available.

# 10 Stability and reactivity

· **Reactivity** No further relevant information available.

- · Chemical stability Stable under normal handling and storage conditions.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: None under normal conditions of storage and use.

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#### **11 Toxicological information**

· Information on toxicological effects

• Acute toxicity:

· LD/LC50 values that are relevant for classification:

107-88-0 butane-1,3-diol

Oral LD50 18610 mg/kg (rat)

- · Primary irritant effect:
- on the skin: No irritant effect.
- $\cdot$  on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information: No further relevant information available.

#### · Carcinogenic categories

· NTP (National Toxicology Program)

Substance is not listed.

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

Substance is not listed.

#### **12 Ecological information**

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

## **13 Disposal considerations**

· Waste treatment methods

· Recommendation:

Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority.

· Uncleaned packagings:

• *Recommendation:* Disposal must be made according to official regulations.

## 14 Transport information

· UN-Number

· DOT, TDG, ADN, IMDG, IATA

Void

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# Trade name: IPS e.max CAD Crystall./Glaze Liquid

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· UN proper shipping name · DOT, TDG, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, TDG, ADN, IMDG, IATA · Class	Void
· Packing group · DOT, TDG, IMDG, IATA	Void
• Environmental hazards: • Marine pollutant:	No
· Special precautions for user	Not applicable.
• Transport in bulk according to Annex II oj MARPOL73/78 and the IBC Code	f Not applicable.
· Transport/Additional information:	Product is not classified as a dangerous good for transport (ADR, IMDG, IATA).
· UN ''Model Regulation'':	-

# **15 Regulatory information**

· Safety, health and environmental regulations/legislation specific for the substance or mixture

- · Sara
- Section 355 (extremely hazardous substances):
- Substance is not listed.
- · Section 313 (Specific toxic chemical listings):
- Substance is not listed.
- TSCA (Toxic Substances Control Act): Substance is listed.
- · Proposition 65
- · Chemicals known to cause cancer:
- Substance is not listed.
- · Chemicals known to cause reproductive toxicity for females:
- Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males:
- Substance is not listed.
- Chemicals known to cause developmental toxicity:
- Substance is not listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency)
- Substance is not listed.
- TLV (Threshold Limit Value established by ACGIH)
- Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health)
- Substance is not listed.

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- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void

· National regulations:

- · Other regulations, limitations and prohibitive regulations
- The product is a medical device according to the Directive 93/42/EEC.

This product is classified as a medical device under US and Canadian regulations and has been reviewed by the US Food and Drug Administration and Health Canada.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **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.

· Date of preparation / last revision 05/18/2015 / 3

· Abbreviations and acronyms:

- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation

IATA: International Air Transport Association

- ACGIH: American Conference of Governmental Industrial Hygienists
- EINECS: European Inventory of Existing Commercial Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)

*LC50: Lethal concentration, 50 percent* 

LD50: Lethal dose, 50 percent

 $\cdot$  \* Data compared to the previous version altered.