

SAFETY DATA SHEETS

This SDS packet was issued with item:

070441154

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

070441121 070441147

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/22/2015

Reviewed on 05/27/2015

1 Identification· **Product identifier**· **Trade name:** **iBOND Ceramic Primer**· **Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

· **Application of the substance / the mixture** Auxiliary for manufacture of dental prothesis· **Details of the supplier of the safety data sheet**· **Manufacturer/Supplier:**Heraeus Kulzer GmbH
Grüner Weg 11, D-63450 Hanau

Tel.: 0800 4372522

· **Information department:**Marc Henn
Tel. +1 (574) 2995444 / Fax: +1 (574) 2912542
e-mail: marc.henn@kulzer-dental.com· **Emergency telephone number:**Emergency CONTACT (24-Hour-Number)
GBK/Infotrac ID 105860: (domestic) 1 800 535 5053 or international (001) 352 323 3500**2 Hazard(s) identification**· **Classification of the substance or mixture**

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

· **Label elements**· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**

GHS02 GHS07

· **Signal word** Danger· **Hazard statements**

Highly flammable liquid and vapor.

Causes serious eye irritation.

May cause drowsiness or dizziness.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Use explosion-proof electrical/ventilating/lighting/equipment.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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

Health = 1

Fire = 3

Reactivity = 0

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Trade name: **iBOND Ceramic Primer**

HMIS-Ratings (Scale 0-4)

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HEALTH	1	Health = 1
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

Results of PBT and vPvB assessment

- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: -

Dangerous components:

67-63-0	propan-2-ol	75-90%
67-64-1	acetone	5-10%

4 First-aid measures

Description of first aid measures

- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **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**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.
- **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 fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**
Can form explosive gas-air mixtures.
Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
 - **Protective equipment:** No special measures required.
 - **Additional information -**

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Prevent seepage into sewage system, workpits and cellars.
Dilute with plenty of water.

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Trade name: **iBOND Ceramic Primer**

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- **Methods and material for containment and cleaning up:**
Absorb with liquid binding material (diatomite, universal binders, for small amounts tissues).
Ensure adequate ventilation.
- **Reference to other sections**
No dangerous substances are released.
See Section 8 for information on personal protection equipment.

7 Handling and storage

- **Precautions for safe handling** Keep receptacles tightly sealed.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
 - **Storage**
 - **Requirements to be met by storerooms and receptacles:** Store in a cool location.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
- **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:**

67-63-0 propan-2-ol	
PEL ()	980 mg/m ³ , 400 ppm
REL ()	Short-term value: 1225 mg/m ³ , 500 ppm Long-term value: 980 mg/m ³ , 400 ppm
TLV ()	Short-term value: 984 mg/m ³ , 400 ppm Long-term value: 492 mg/m ³ , 200 ppm

67-64-1 acetone	
PEL ()	2400 mg/m ³ , 1000 ppm
REL ()	590 mg/m ³ , 250 ppm
TLV ()	Short-term value: 1782 mg/m ³ , 750 ppm Long-term value: 1188 mg/m ³ , 500 ppm BEI
- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**
 - **Personal protective equipment**
 - **General protective and hygienic measures**
Avoid contact with the eyes.
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 and skin.
 - **Breathing equipment:**
Use suitable respiratory protective device in case of insufficient ventilation.

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Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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.

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
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR
Chloroprene rubber, CR
PVC or PE gloves
Neoprene gloves

For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Natural rubber, NR

· **Eye protection:** Protective goggles are recommended.

· **Body protection:** Light weight protective clothing

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

· **Form:** Fluid
· **Color:** Colorless
· **Odor:** Alcohol-like

Change in condition

· **Melting point/Melting range:** undetermined
· **Boiling point/Boiling range:** 55 °C (131 °F)

· **Flash point:** 5 °C (41 °F)

· **Ignition temperature:** >400 °C (>752 °F)

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

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/ vapor mixtures are possible.

Explosion limits:

· **Lower:** 2.0 Vol %
· **Upper:** 12.0 Vol %

· **Vapor pressure at 20 °C (68 °F):** 48 hPa (36 mm Hg)

· **Density at 20 °C (68 °F):** 0.800 g/cm³ (6.676 lbs/gal)

Solubility in / Miscibility with

· **Water:** Fully miscible

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Trade name: **iBOND Ceramic Primer**

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- **Solvent content:**
- **Water:** 4.0 %
- **VOC USA** 2924.5 g/l / 24.41 lb/gal
- **Other information** No further relevant information available.

10 Stability and reactivity

- **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

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

67-63-0 propan-2-ol

Oral	LD50	4570 mg/kg (rat)
Dermal	LD50	13400 mg/kg (rab)
Inhalative	LC50/4 h	30 mg/l (rat)

67-64-1 acetone

Oral	LD50	5800 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** Irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

67-63-0	propan-2-ol	3
80-62-6	methyl methacrylate	3
102-71-6	2,2',2"-nitrioltriethanol	3
7647-01-0	hydrogen chloride	3
	Butyl-hydroxy-toluol	3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

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12 Ecological information· **Toxicity**· **Aquatic toxicity:****67-63-0 propan-2-ol**

EC50/48h 13299 mg/l (daphnia)

EC50/72h >1000 mg/l (algae)

LC50/96h 1400 mg/l (fish)

67-64-1 acetone

EC50/48h 6100 mg/l (daphnia)

LC50/96h 5540 mg/l (fish)

· **Persistence and degradability** No further relevant information available.· **Bioaccumulative potential** No further relevant information available.· **Mobility in soil** No further relevant information available.· **Additional ecological information:**· **General notes:**

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**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**· **Recommendation:** Disposal must be made according to official regulations.· **Recommended cleansing agent:** Water, if necessary with cleansing agents.**14 Transport information**· **UN-Number**· **DOT, ADR, IMDG, IATA**

UN1993

· **UN proper shipping name**· **ADR**1993 FLAMMABLE LIQUID, N.O.S.
(ISOPROPANOL (ISOPROPYL ALCOHOL),
ACETONE)· **IMDG, IATA**FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL
(ISOPROPYL ALCOHOL), ACETONE)

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Trade name: **iBOND Ceramic Primer**

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· **Transport hazard class(es)**· **DOT**
 · **Class**
 · **Label**

 3 Flammable liquids
 3
· **ADR**
 · **Class**
 · **Label**

 3 (F1) Flammable liquids
 3
· **IMDG, IATA**
 · **Class**
 · **Label**

 3 Flammable liquids
 3
· **Packing group**· **DOT, ADR, IMDG, IATA**

II

· **Environmental hazards:**· **Marine pollutant:**

No

· **Special precautions for user**

Warning: Flammable liquids

· **Danger code (Kemler):**

33

· **EMS Number:**

F-E, S-E

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

-

· **UN "Model Regulation":**
 UN1993, Flammable liquids, n.o.s., special
 provision 640D (Isopropanol (Isopropyl alcohol),
 Acetone), 3, II

15 Regulatory information
· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **SARA Section 355 (extremely hazardous substances)**

7647-01-0 | hydrogen chloride

· **Carcinogenicity categories**· **TLV (Threshold Limit Value established by ACGIH)**

67-64-1 | acetone

A4

80-62-6 | methyl methacrylate

A4

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Trade name: **iBOND Ceramic Primer**

Butyl-hydroxy-toluol

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A4

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS02 GHS07

Signal word Danger**Hazard statements**

Highly flammable liquid and vapor.

Causes serious eye irritation.

May cause drowsiness or dizziness.

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Use explosion-proof electrical/ventilating/lighting/equipment.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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

Date of preparation / last revision 06/22/2015 / -**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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

USA