

Material Safety Data Sheet

According to 91/155 EEC

Printing date 06.03.2007

Reviewed on 06.03.2007

1 Identification of substance:

· **Product details:**

· **Trade name:** *XP BOND*

· **Application of the substance / the preparation** *Adhesive*

· **Manufacturer/Supplier:**

DENTSPLY DeTrey GmbH
De-Trey-Str. 1
D-78467 Konstanz
GERMANY

Tel.: +49-7531-583-0

Fax: +49-7531-583-104

· **Further information obtainable from:**

- *Departement Analytical Research / Research & Development for technical information*
- *Departement Marketing & Sales for distribution of the safety data sheets*

· **Information in case of emergency:** +49-7531-583-0

2 Composition/Data on components:

· **Chemical characterization**

· **Description:** *Mixture of substances listed below with nonhazardous additions.*

· **Dangerous components:**

	<i>methacrylate with the exception of those specified elsewhere in this Annex</i>	<i>25-50%</i>
	<i>Xi; R 36/37/38</i>	
<i>CAS: 75-65-0</i> <i>EINECS: 200-889-7</i>	<i>2-methylpropan-2-ol</i>	<i>10-25%</i>
	<i>Xn, F; R 11-20</i>	
	<i>acrylates with the exception of those specified elsewhere in this Annex</i>	<i>10-25%</i>
	<i>Xi, N; R 36/37/38-51/53</i>	

· **Additional information** *For the wording of the listed risk phrases refer to section 16.*

3 Hazard identification

· **Hazard description:**

Xi Irritant

F Highly flammable

· **Information concerning to particular hazards to 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.

R 11 Highly flammable.

R 36/37/38 Irritating to eyes, respiratory system and skin.

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

· **Classification system**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

4 First aid measures

· **After inhalation** *Supply fresh air; consult doctor in case of complaints.*

· **After skin contact** *Immediately wash with water and soap and rinse thoroughly.*

· **After eye contact**

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

· **After swallowing** *If symptoms persist consult doctor.*

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5 Fire fighting measures

- **Suitable extinguishing agents** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents**
Water.
Water with full jet.
- **Protective equipment:** Wear self-contained respiratory protective device

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
Prevent seepage into sewage system, workpits and cellars.
Inform respective authorities in case of seepage into water course or sewage system.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents

7 Handling and storage

- **Handling** Product is intended for dental use only.
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Observe normal care for working with chemicals.
- **Information about fire - and explosion protection:**



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Store only in the original receptacle.
Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls and personal protection gear

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

75-65-0 2-methylpropan-2-ol

OES	Short-term value: 462 mg/m ³ , 150 ppm
	Long-term value: 308 mg/m ³ , 100 ppm

- **Additional information:** The lists valid during the making 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 and skin.

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- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Protection of hands:**



Protective gloves.

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. 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.

- **Eye protection:** Safety glasses

- **Body protection:** Protective work clothing.

9 Physical and chemical properties:

- **General Information**

Form:	Fluid
Colour:	Light yellow
Odour:	Characteristic

- **Change in condition**

Melting point/Melting range: undetermined

Boiling point/Boiling range: undetermined

- **Flash point:** 19°C

- **Self-igniting:** Product is not selfigniting.

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

- **Density:** Not determined

- **Solubility in / Miscibility with**

Water: Partly miscible

- **pH-value at 20°C:** 2.5

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous decomposition products:** No dangerous decomposition products known

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11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
 - **on the skin:**
Irritant to skin and mucous membranes.
The unpolymerized product may be irritant to the skin for susceptible persons.
 - **on the eye:** Irritating effect.
- **Sensitization:**
Repeated or prolonged contact with the not polymerized product may cause sensitization for acrylates / methacrylates.
- **Additional toxicological information:**
Irritant
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.

12 Ecological information:

- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **General notes:** Harmful to aquatic organisms

13 Disposal considerations

- **Product:**
- **Recommendation**



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

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 (F1) Flammable liquids.
- **Danger code (Kemler):** 33
- **UN-Number:** 1993
- **Packaging group:** II
- **Hazard label** 3
- **Description of goods:** 1993 FLAMMABLE LIQUID, N.O.S., (2-Methylpropanol-2, mixture) (vapor pressure at 50°C at most 110 kPa)

- **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1993

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- **Label** 3
- **Packaging group:** II
- **EMS Number:** F-E,S-E
- **Marine pollutant:** No
- **Proper shipping name:** FLAMMABLE LIQUID, N.O.S., (2-Methylpropanol-2, Acrylate, mixture)

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1993
- **Label** 3
- **Packaging group:** II
- **Proper shipping name:** FLAMMABLE LIQUID, N.O.S., (2-Methylpropanol-2, Acrylate, mixture)

15 Regulations

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

- **Code letter and hazard designation of product:**



Xi Irritant
F Highly flammable

- **Risk phrases:**

11 Highly flammable.
36/37/38 Irritating to eyes, respiratory system and skin.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Safety phrases:**

9 Keep container in a well-ventilated place.
16 Keep away from sources of ignition - No smoking.
23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
28 After contact with skin, wash immediately with plenty of water.
33 Take precautionary measures against static discharges.

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.

The attached safety data sheet covers the dangers and measures to be taken when large quantities of material are released, for example due to accidents during transport or storage by the dealer.
For quantities of material typically used in clinical practice, information necessary for safe use and storage of the product is given in the DFU.

- **Relevant R-phrases**

11 Highly flammable.
20 Harmful by inhalation.
36/37/38 Irritating to eyes, respiratory system and skin.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Department issuing MSDS:** Analytical Research