

## Bijlage III De safety data sheet..

### Material Safety Data Sheet

Trade-mark : Propal Acrylate	Ditributed by : Belgica Dental NV Krijgslaan 8-10 B-9000 Gent  Telephone : +32 9 221 50 53 Fax : +32 9 221 50 69
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<b>2. Commercial Product Name:</b> Propal prorep – autopolymerisant			
<b>2.1 Chemical Characterisation:</b> Methacrylate Polymer containing residual peroxide initiator This product contains the following hazardous components:			
Dibenzoyl peroxide	>1%	E; O; Xi; R2,R7,R36,R43	
<b>2.2 Form:</b> Fine Beads	<b>2.3 Colour:</b> White, Light pink, Pink, Opaque	<b>2.4 Odour:</b> Mild	

<b>3. Hazards Identification:</b>
<b>3.1 Principal Hazard:</b> Dibenzoyl peroxide is an eye irritant and may cause skin sensitisation.

<b>4. First-Aid Measures:</b>
<b>4.1 Eyes and Skin:</b> Wash skin in running water and mild soap. After contact with eyes, flush with water.
<b>4.2 Inhalation:</b> This is an extremely unlikely source of exposure. The product should be regarded as a nuisance dust.
<b>4.3 Ingestion:</b> Wash out mouth with water. Do not induce vomiting. Give water to drink. If patient feels unwell seek medical attention.

<b>5. Fire Fighting Measures:</b>
<b>5.1 Extinguishing Media Suitable :</b> Foam, Water Mist
<b>5.2 Special Exposure Hazards:</b> The following vapours may arise during fires: <ul style="list-style-type: none"><li>- Methacrylate Monomer Vapours</li><li>- Carbon Monoxide</li></ul>

<b>6. Accidental Release Measures:</b>
<b>6.1</b> Collect in containers for disposal using approved dust respirator.

<b>7. Handling and Storage:</b>
<b>7.1</b> Store in original container in a cool dry place. Avoid spillages.

<b>8. Exposure Controls and Personal Protection:</b>
<b>8.1 Personal Protective Equipment:</b>
<b>8.1.1 Respiratory Protection:</b> Not normally required. If dust generation occurs, use approved dust respirator. See also Section 4.2 above.
<b>8.1.2 Hand Protection:</b> Wear suitable gloves.
<b>8.1.3 Eye Protection:</b> Wear Goggles.
<b>8.2 Industrial Hygiene:</b> Powders have a drying effect on the skin and use of a barrier cream may reduce this effect.

<b>Date:</b>	<b>Last Revised:</b> 20/05/98
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**9. Physical and Chemical Properties:**

9.1 Physical form:		white, light pink, pink and opaque pink powder	
9.2 Odour:		mild	
9.3 Density:	(20°C)	1.1 – 1.18	g/cm <sup>3</sup>
Bulk Density:		ca. 550-750	kg/cm <sup>3</sup>
9.4 Vapour Pressure:	( °C)	N/A	mbar
9.5 Viscosity	( °C)	N/A	
9.6 Solubility in Water:	( °C)	Insoluble	g/l
9.7 pH-value (at g/l H <sub>2</sub> O):		Unknown	g/l
9.8 Flash point:		N/A	°C
9.9 Ignition Temperature:		N/A	°C
9.10 Explosion Limits:	Lower:	N/A	%
	Upper:	N/A	%

**10. Stability and Reactivity:**

10.1 Thermal Decomposition: Polymer will decompose at temperatures over ca. 240°C.

10.2 Hazardous Decomposition Products: Methacrylate Monomer Vapours

10.3 Hazardous Reactions: Will react with methacrylate monomers.

**11. Toxicological Information: (data for Dibenzoyl peroxide)**

Dibenzoyl peroxide has been self classified as a danger to water; Water Pollution Class 2.  
LD<sub>50</sub>, Oral (rat) > 5000 mg/kg.

**12. Ecological Information:**

This polymer is non-volatile and insoluble so will accumulate in the ground. It is expected to be readily biodegradable and to have low aquatic toxicity.

**13. Disposal Considerations:**

Dispose in accordance with local regulations.

**14. Transport Considerations:**

Polymethacrylates do not fall under the transportation classification for dangerous substances.

**15. Regulatory Information:****15.1 Risk Phrases:**

R43 May cause sensitisation by skin contact

**15.2 Safety Phrases:**

S22 Avoid breathing dust  
S37 Wear suitable gloves

**15.3 Hazard Symbols: Xi; Irritant (St Andrews Cross)**

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# Material Safety Data Sheet

<b>Company :</b> Propal	<b>Distributed by :</b> Belgica Dental NV Krijgslaan 8-10 B-9000 Gent
	Telephone : +32 9 221 50 53 Fax : +32 9 221 50 69

## 2. Commercial Product Name: Prorep cold cure monomer – autopolymerisant liquid

### 2.1 Chemical Characterisation: Mixture based on Methyl Methacrylate Monomer.

This product contains the following hazardous components:

Methyl Methacrylate F+; Xi R11, R36/37/38, R43>95%

Dimethyl-p-toluidine T: R23/24/25-33 1-5%

2.2 Form: Liquid      2.3 Colour: Clear      2.4 Odour: Typical

## 3. Hazards Identification:

3.1 **Principal Hazard:** This product contains a mixture based on methyl methacrylate, which has a recommended occupational exposure limit (OEL) of 50ppm (8 hour TWA), with a short term exposure limit (STEL) of 100ppm (15 minute reference period). Liquid methyl methacrylate is irritating to the skin and eyes. May cause sensitisation by skin contact. Prolonged and repeated skin contact can cause dermatitis. The vapour, in high concentrations, can cause respiratory irritation and anaesthetic effects. There is no evidence that methyl methacrylate produces a carcinogenic effect in humans or animals.

## 4. First-Aid Measures:

4.1 **Eyes and Skin:** Flush with copious volumes of water. Seek medical attention.

4.2 **Inhalation:** Remove to fresh air. Apply artificial respiration if necessary. Seek medical attention.

4.3 **Ingestion:** Do not induce vomiting. Seek medical attention immediately.

## 5. Fire Fighting Measures:

5.1 **Extinguishing Media Suitable :** Dry powder, Carbon Dioxide, Foam or Gas. Keep fire exposed containers cool by spraying with water.

Not to be used: water

5.2 **Special Exposure Hazards:** The following vapours may arise during fires:

- Methacrylate Monomer Vapours
- Carbon Monoxide

## 6. Accidental Release Measures:

6.1 **Eliminate sources of ignition.** Spillages should be cleaned immediately with suitable absorbent material. E.g. Sand or Fullers earth and disposed of in accordance with local regulations. Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body. Ensure that personal protective equipment is worn as advised in Section 8.

## 7. Handling and Storage:

7.1 This product contains flammable solvents and should be stored in well ventilated, no-smoking areas away from heat and naked flames. Electrical equipment should be spark and flame proof. Take precautions against static discharge. The vapour is heavier than air; beware of pits and confined spaces. The storage temperature should be maintained below 25°C.

## 8. Exposure Controls and Personal Protection:

### 8.1 Personal Protective Equipment:

8.1.1 **Respiratory Protection:** Suitable Organic Vapour Mask (E.g. 3M Model 4251), in the case of particularly high vapour levels (in excess of STEL) self contained breathing apparatus may be appropriate.

8.1.2 **Hand Protection:** Nitrile rubber Gloves

8.1.3 **Eye Protection:** Goggles or full face shield

8.2 **Industrial Hygiene:** Barrier creams should be used routinely by all personnel using solvent based products.

**9. Physical and Chemical Properties:****9.1 Change in Physical State:**

°C

°C

9.2 Density: ( °C)

g/cm<sup>3</sup>

Bulk Density:

kg/cm<sup>3</sup>

9.3 Vapour Pressure:

( °C)

36.8

mbar

9.4 Viscosity

( °C)

mPa.s

9.5 Solubility in Water:

( °C)

g/l

9.6 pH-value (at g/l H<sub>2</sub>O):

g/l

9.7 Flash point:

10

°C

9.8 Ignition Temperature:

421

°C

9.9 Explosion Limits:

Lower:

2.1

%

Upper:

12.5

%

**10. Stability and Reactivity:****10.1 Thermal Decomposition:****10.2 Hazardous Decomposition Products:** Does not decompose up to auto-ignition temperature**10.3 Hazardous Reactions:** Stable in the presence of inhibitor. Susceptible to polymerisation initiated by prolonged heating or in the presence of catalysts such as peroxy or azo compounds, strong acids, alkalis and oxidising agents.**11. Toxicological Information:**Methyl Methacrylate is irritating to the skin and eyes. The vapour of methyl methacrylate monomer, in high concentrations may cause respiratory irritation, dizziness, drowsiness and temporary confusion, ultimately leading to unconsciousness. There is no evidence that methyl methacrylate monomer produces a carcinogenic effect in humans or animals. Rat oral LD<sub>50</sub> 7000-9000 mg/kg. Details on first-aid measures are given in Section 4.**12. Ecological Information:**The product is sparingly soluble in water and has a high potential for bioaccumulation. It is partially biodegradable in water and of low toxicity to fish LC<sub>50</sub> (bluegill catfish)/96h = 232mg/l**13. Disposal Considerations:**

Preferred disposal route is by controlled incineration at an approved site, in accordance with local or national regulations. Empty drums should be decontaminated before recycling.

**14. Transport Considerations:**

GGVSee/IMDG Un Number 1247 ICAO/IATA-DGR 3(ii) RID/ADR 339; 3.3(b)

**15. Regulatory Information:****15.1 Risk Phrases:**

R11 Highly Flammable

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed

R33 Danger of cumulative effects

R36/37/38 Irritating to eyes, respiratory system and skin

R43 May cause sensitisation by skin contact

**15.2 Safety Phrases:**

S9 Keep container in a well ventilated place

S16 Keep away from sources of ignition

NO SMOKING

S29 Do not empty into drains

S33 Take precautionary measures against static discharge

**15.3 Hazard Symbols:** Flaming Torch F+, St Andrews Cross Xn

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