



**SAFETY DATA SHEET (SDS)**  
**DP-ORTHO-C**

**1. IDENTIFICATION**

Product Name: Acrylic resin DP-Ortho-C  
Other Name or Code: 1091100, 1091200, 1091300  
1091112, 1091212, 1091312  
1091114, 1091214, 1091314  
1091127, 1091227, 1091327  
Use: Orthodontic appliances  
Supplier Name: DenPlus Inc.  
Address: 333-M Chemin du Tremblay  
Boucherville, QC, Canada, J4B 7M1  
Phone Number for Information: 450.641.1330  
Emergency Phone Number: 613.996.6666  
Anti-Poison Center of Quebec 1.800.463.5060

**2. HAZARDS IDENTIFICATION**

**2.1 Classification**

Combustible dust – Category 1

**2.2 Label elements**

Signal word: Warning

Hazard statement: May form combustible dust concentrations in air

**3. INFORMATION ON INGREDIENTS**

Polymer beads based on ethyl methacrylate containing residual peroxide.

<b>Hazardous ingredients</b>	<b>CAS</b>	<b>Concentration range (by weight)</b>
No classifiable hazardous ingredient		

## 4. FIRST-AID MEASURES

### 4.1 Description of first aid measures

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.
Skin Contact	IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs, get medical attention.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if ill effects occur.
Ingestion	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Obtain medical attention if ill effects occur.

### 4.2 Most important symptoms and effects, both acute and delayed

Not applicable.

### 4.3 Indication of any immediate medical attention and special treatment needed

None necessary.

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

In case of fire, use water spray, carbon dioxide (CO<sub>2</sub>), spray foam, dry powder. Do not use water jet.

### 5.2 Special hazards arising from the substance or mixture

Combustible but not readily ignited. Combustion or thermal decomposition will evolve toxic, irritant or flammable vapors. This product can form flammable dust clouds at elevated temperatures. The minimum ignition temperature of a dust cloud of a similar polymer has been measured at approximately 480 °C.

### 5.3 Advice for firefighters

A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Caution – spillage may be slippery.

### 6.2 Environmental precautions

Avoid release to the environment.

### 6.3 Methods and material for containment and cleaning up

Collect in containers for disposal using approved dust respirator.

### 6.4 Reference to other sections

See sections: 8 and 13

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Do not eat, drink or smoke at the work place.

Product as supplied: Avoid contact with eyes. Avoid prolonged skin contact. Unlikely to represent a dust hazard under normal handling conditions.

Dental resins are usually processed in conjunction with reactive monomers and this may require the use of a higher level of protection than the necessary for the polymer itself.

### 7.2 Conditions for safe storage, including any incompatibilities

Acrylic polymers are supplied in either bags or bulk containers. Keep containers in a clean, cool and dry area away from heat sources. Natural ventilation is adequate.

Storage temperature (°C): Ambient.

Incompatible materials: Polymer contains residual benzoyl peroxide. This may react with oxidizing agents, reducing agents, acids, bases and amines leading to decomposition.

### 7.3 Specific end use(s)

Production of dentures.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### 8.1 Control parameters

Substance	LTEL
Dibenzoyl peroxyde	5 mg/m <sup>3</sup>
Dust (total inhalable dust)	10 mg/m <sup>3</sup>
Dust (respirable dust)	4 mg/m <sup>3</sup>

LTEL: Long-term exposure limit

### 8.2 Exposure controls

Appropriate engineering controls

Do not eat, drink or smoke at the work place. Provide adequate ventilation, including appropriate local extraction, to ensure that the occupational exposure limit is not exceeded. Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required. The following information is given as general guidance.

## Individual protection measures

Eye/face protection	Wear eye/face protection. Safety spectacles/goggles/full face shield.
Skin protection	Not normally required, however use of gloves is recommended. Suitability of gloves should be confirmed with glove manufacturer.
Respiratory protection	A suitable dust mask or dust respirator with filter type P3 or FFP3 may be appropriate. In the unlikely event of formation of particularly high levels of dust a self contained breathing apparatus may be appropriate.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White or colored powder
Odor	Typically methacrylate
pH (Value)	Not applicable
Melting Range (°C)	150 - 230
Boiling Point (°C)	Not applicable
Flash Point (°C)	~ 390
Flammability (solid, gas)	Not applicable
Flammable Limits	Not applicable
Vapor pressure (Pascal)	Not applicable
Vapor Density (Air=1)	Not applicable
Solubility (Water)	Negligible
Solubility (Other)	Not applicable
Partition Coefficient (n-Octanol/water)	Not applicable
Auto Ignition Temperature (°C)	~ 465
Viscosity (mPa. s)	Not available
Explosive properties	Weakly to moderately explosive
Oxidizing properties	Not applicable
Density (g/ml)	1.1 – 1.18

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Non-reactive material.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

None known.

### 10.4 Conditions to avoid

Avoid dust generation.

### 10.5 Incompatible materials

Polymer contains residual benzoyl peroxide. This may react with oxidizing agents, reducing agents, acids, bases and amine leading to decomposition.

### 10.6 Hazardous decomposition products

Methyl methacrylate, n-butyl methacrylate, dibenzoyl peroxide, carbon dioxide, carbon monoxide.

## 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Ingestion

Inhalation

Skin contact

Eye contact

Low oral toxicity.

Unlikely to be hazardous by inhalation.

Unlikely to cause skin irritation.

Dust may cause irritation.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

This product is predicted to have low toxicity to aquatic organisms.

### 12.2 Persistence and degradability

This product is non-biodegradable in soil. There is no evidence of degradation in soil and water.

### 12.3 Bioaccumulative potential

The product has low potential for bioaccumulation.

### 12.4 Mobility in soil

The product is predicted to have low mobility in soil.

### 12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

### 12.6 Other adverse effects

None known.

## 13. DISPOSAL CONSIDERATIONS

The waste is considered to be non hazardous. Clean scrap may be reprocessed. Dispose in accordance with local regulations.

### 13.1 Waste treatment methods

May be disposed of by landfill in accordance with local regulations.

## **14. TRANSPORTATION CONSIDERATIONS**

Not Classified as Dangerous for Transport.

### **14.1 UN number**

Not applicable.

### **14.2 UN Proper Shipping Name**

Not applicable.

### **14.3 Transport hazard class(es)**

Not applicable.

### **14.4 Packing group**

Not applicable.

### **14.5 Environmental hazards**

Not applicable.

### **14.6 Special precautions for user**

Not applicable.

### **14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code**

Not applicable.

## **15. REGULATORY INFORMATION**

WHMIS 2015

Canadian Hazardous Products Regulations (SOR2015-17)

Canadian Hazardous Products Act (R.S.C., 1985, c. H-3)

Hazardous Products Information Regulation (Quebec S-2.1, r. 8.1)

## **16. OTHER INFORMATION**

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