

Product Identity:

RESIN PLUS TEMP MONOMER

Corona, Ca. 92880

951-520-1300 877-500-0081
www.indenco.com

SECTION I.

Identification

REVISION:

MAY 2006

Manufacturer

INDENCO Dental Products

149 NW MAPLE ST. # B

Corona, CA 92880

Emergency Telephone Number:

Infotrack (800) 535 - 5053

Product Information Number:

(951) 520-1300

SECTION II.

Composition/Information on Ingredients

Liquid based on methacryl acid ester, containing an activator, used for the production of temporary crowns and bridges in dental medicine.

Dangerous Components:

CAS: 80-62-6 methyl methacrylate Xi, F;R 11-37/38-43 50-75%

EINECS: 201-297-1

CAS: 142-09-6 N-Hexylmethacrylat Xi: R 36/37/38 2.5-10%

SECTION III.

Hazardous Ingredients/Identity Information



Xi Irritant

F Highly flammable

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.

R11 Highly flammable

R37/38 Irritating to respiratory system and skin.

R 43 May cause sensitivity by skin contact.

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

SECTION IV.

First Aid Measures

General Information: Immediately remove any clothing soiled by the product.
After Inhalation: Supply fresh air; consult doctor in case of complaints.
After Skin Contact: Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
After Eye Contact: Rinse opened eye for several minutes under running water, then consult a doctor.
After Swallowing: Call a doctor immediately.

SECTION V.

Fire-Fighting Measures

Suitable Extinguishing Agents:
Carbon dioxide
Fire-extinguishing powder
Foam
Water spray

For safety reasons unsuitable extinguishing agents:
Water with full jet
Protective Equipment:
Wear self-contained respiratory protective device.
Wear fully protective suit.

Product: **RESIN PLUS TEMP MONOMER****SECTION VI.****Accidental Release Measures**

Person-Related Safety Precautions:

- Ensure adequate ventilation
- Wear protective clothing
- Keep away from ignition sources

Measures for Cleaning/Collecting:

- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Ensure adequate ventilation.
- Dispose of the material collected according to regulations.

Additional Information: See Section 13 for disposal information.

SECTION VII.**Handling and Storage**

Handling:

- Keep receptacles tightly sealed.
- Keep away from heat and direct sunlight
- Ensure good ventilation/exhaustion at the workplace.

Information about Fire and Explosion Protection:

- Keep ignition sources away - Do not smoke.
- Protect against electrostatic charges.
- Fumes can combine with air to form an explosive mixture.

Storage:

- Requirements to be met by storerooms and receptacles:
 - Store in a cool location.
- Information about storage in one common storage facility:
 - Store away from food stuffs.
- Further information about storage conditions:
 - Keep receptacle tightly sealed.
 - Store in cool, dry conditions in well sealed receptacles.
 - Protect from exposure to light.
- Storage Class:
 - Not determined

SECTION VIII.**Exposure Controls / Personal Protection**

Additional information about design of technical facilities: No further data; see Section VII.

Ingredients with limit values that require monitoring at the workplace:

- 80-62-6 methyl methacrylate
- OES Short-term value: 416 mg/m³, 100 ppm
- Long-term value: 208 mg/m³, 50 ppm

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.

Respiratory Protection:

Use suitable respiratory protective device when high concentrations are present.

Protection of Hands:

Protective gloves.

Material of Gloves:

Rubber gloves.

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:

Tightly sealed goggles.

SECTION IX.**Physical and Chemical Properties**

General Information:

Form:	Fluid
Colour:	Clear
Odour:	Ester-like

Change in Conditions:

Melting point/Melting range:	48°C (118 F)
Boiling point/Boiling range:	101°C (214 F)

Flash Point: 10°C (50 F) (DIN 51755)

Ignition Temperature: 430°C (806 F) (DIN 51794)

Self-igniting: Product is not self-igniting.

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

Explosion Limits:

Lower:	2.1 Vol % (Literatur)
Upper:	12.5 Vol % (Literatur)

Vapour Pressure at 20°C: 47 hPa

Density at 20°C: 0.967 g/cm³

Solubility in / Miscibility with

Water :	Not Miscible or difficult to mix
pH-value:	Not determined
Viscosity: (Dynamic/Kinematic)	Not determined
Solvent Content: (Organic solvents):	0.0 %
Solids Content:	0.3 %
Additional Information:	_____

SECTION X.**Stability and Reactivity**

Thermal Decomposition/Conditions to be avoided:

No decomposition if used according to specifications.

Materials to be avoided:

In presence of radical formers (e.g. peroxides), deoxidizing substances, and/or heavy metals ions, polymerization with heat release is possible.

Dangerous reactions:

No dangerous reactions known.

Dangerous decomposition products:

No dangerous decomposition products known.

SECTION XI.**Toxicological Information**

Acute Toxicity:

LD/LD50 values relevant for classification:

Methyl Methacrylate	LD-50 oral	> 500 mg/kg rat (lit.)
n-Hexylmethacrylate	LD-50 Inhalative	7093 ppm/4 rat (lit.)

Primary Irritant Effect:

Skin: Irritant to skin and mucous membranes.

Eye: Irritating effect.

Sensitization:

Sensitization possible through skin contact.

Additional toxicological information:

This 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

SECTION XII. Ecological Information

Behavior in environmental systems:

Components:	Methyl Methacrylate	Biodegradability:	30.7%
Time:		28 d	
Method:		OECD 301 C	
Valuation:		Difficult to decompose	
Ecotoxicological Effects:			
Acquatic Toxicity:			
Type of Test:		Effective Concentration Method Assessment	
Toxicity to Fish:	LC-50 > 79mg/l	OECD 203	
(MMA)	NOEC: 40 MG/L	ISO 7346	
	Time: 96 h	EEC84	
	Species: Oncorhynchus mykiss		
Toxicity to Micro-Organisms:	ECO: 100 mg/l		Starting Inhibition of cell growth.
Species:	Pseudomonas putida		

General Notes:

Do not allow product to reach ground water, water course or sewage system, even in a small quantities.

SECTION XIII. Disposal Considerations

Product Recommendation:

Must not be disposed together with household garbage. Do not allow product to reach sewage system. After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

European Waste Catalogue:

(07 01 04) other organic solvents, washing liquids and mother liquor.

Uncleaned Packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION IVX. Transport Information

Land Transport ADR/RID (Cross-border)



ADR/RID Class:	3 (Fl) Flammable liquids
Danger code (Kemler):	339
UN-Number:	1247
Packaging Group:	II
Hazard Label:	3
Description of goods:	1247 METHYL METHACRYLATE MONOMER, STABILIZED

Maritime Transport IMDG:



IMDG Class:	3
UN Number:	1247
Label:	3
Packaging Group:	II
EMS Number:	F-E, S-D
Marine Pollutant:	No
Proper Shipping Name:	METHYL METHACRYLATE MONOMER, STABILIZED

Air Transport ICAO-TI and IATA-DGR:



ICAO/IATA Class:	3
UN/ID Number:	1247
Label:	3
Packaging Group:	II
Proper Shipping Name:	METHYL METHACRYLATE MONOMER, STABILIZED

SECTION XV.

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

Hazard-determining Components of Labelling:

Methyl Methacrylate

Risk Phrases:

11 Highly flammable.

37/38 Irritating to respiratory system and skin.

43 May cause sensitization.

Safety Phrases:

9 Keep container in a well-ventilated place.

16 Keep away from sources of ignition - no smoking.

24 Avoid contact with skin.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

37 Wear suitable gloves.

60 This material and its' container must be disposed of as hazardous waste.

National Regulations:

Technical Instructions (air):

Class	Share in %
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II	50 - 75
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III	2.5 - 10
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Water Hazard Class: Water hazard class 2 (Self-assessment): Hazardous for water.

SECTION XV.

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.

Relevant R-phrases

11	Highly flammable.
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36/37/38	Irritating to eyes, respiratory system and skin.
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43	May cause sensitization by skin contact.
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Department Issuing MSDS: F& E GDF GmbH

Contact: Dr. U. Krichbaum

*Data compared to the previous version altered.

The data herein relates to the product named and is based upon information that **Indenco Dental Products, Inc.** believes to be reliable and accurate. No warranty expressed or implied is intended. Users of this product have the responsibility to determine the suitability of use and to adopt all necessary precautions to ensure the safety and protection of property and persons involved in said use. This information is offered solely for your consideration and interpretation.