

Product Identity:

**RESIN PLUS LIQUID VARNISH**

**SECTION I. Identification**

REVISION: MAY 2006

Manufacturer

Dental Ventures of America Inc.  
217 Lewis Court  
Corona, CA. 92882

Emergency Telephone Number:

Infotrack (800) 535 - 5053  
Product Information Number:  
(951) 270 - 0606

**SECTION II. Composition/Information on Ingredients**

General Description: Liquid based on methacryl acid ester.

Dangerous Components:

CAS: 80-62-6 Methyl Methacrylate  
EINECS: 201-297-1



Xi Irritant



F: R 11-37/38-43

50-75%

**SECTION III. Hazardous Ingredients/Identity Information**



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 Preparation 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.

Classification System:

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: Take affected persons into fresh air and keep quiet. Seek medical treatment 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: Rinse out mouth and then drink large quantity of water. Seek medical treatment.

**SECTION V. Fire-Fighting Measures**

Suitable Extinguishing Agents: Carbon dioxide, fire-extinguishing powder, foam or water haze.  
For Safety Reasons Unsuitable Extinguishing Agents: Water with full jet.  
Special Hazards Caused by Substance or Products of Combustion or Resulting Gases:  
Danger of polymerization.  
Can form explosive gas-air mixtures.  
Protective Equipment: No special measures required.  
Additional Information: Cool endangered receptacles with water spray.  
Collect contaminated fire-fighting water separately. It must not enter sewage system.  
Dispose of fire debris and contaminated fire fighting water in accordance with regulations.

Product: **RESIN PLUS LIQUID VARNISH****SECTION VI. Accidental Release Measures**

Person-Related Safety Precautions:	Ensure adequate ventilation. Avoid eye and skin contact with the substance. Wear protective equipment. Keep unprotected persons away. Keep away from ignition sources.
Measures of Environmental Protection:	Do not allow to enter sewers/surface or ground water.
Measures for Cleaning/Collecting:	When pumping out, please ensure grounding. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents. Dispose of the material collected according to regulations.

**SECTION VII. Handling and Storage**

Handling:	Keep receptacles tightly sealed. Ensure good ventilation/exhaustion at the workplace.
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:	Use explosion-proof apparatus/fittings and spark-proof tools. Store only in the original receptacle. Do not store at temperatures over 30 C Only fill container up to 80%. Close container immediately after use. Store in a cool location.
Further information about Storage Conditions:	Keep receptacle tightly sealed. Store in cool, dry conditions. 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/m <sup>3</sup> , 100 ppm
Long-term value:	208 mg/m <sup>3</sup> , 50 ppm
Additional Information: Personal Protective Equipment General Protective and Hygienic Measures:	The lists valid during the making were used as basis. Keep away from foodstuffs. 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:	Not necessary if room is well-ventilated. Use suitable respiratory protective device when high concentrations are present.
Short Term Filter Device:	Filter AX
Protection of Hands: Penetration Time of Glove Material:	Solvent resistant gloves./Butyl rubber, BR 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.
Body Protection:	Protective work clothing.

Product: **RESIN PLUS LIQUID VARNISH****SECTION IX. Physical and Chemical Properties**

Form:	Fluid	Explosion Limits:	Lower: 2.1 Vol%
Color:	Colorless		Upper: 12.5 Vol%
Odor:	Characteristic	Vapor Pressure @ 20 C:	47 hPa
Melting Point/Range:	-48 C	Density @ 20C:	Not determined
Boiling Point/Range:	101.3 C	Solubility with Water:	Slightly soluble
Flash Point:	10 C	Viscosity/Dynamic:	Not determined.
Ignition Temperature:	430 C		
Danger of Explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.		

**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 metal ions, polymerization with heat release is possible.

Dangerous Reactions: Exothermic polymerization.

Dangerous Decomposition Products: At temperatures above 250 C, depolymerization and the release of starting monomers can arise.

**SECTION XI. Toxicological Information**

Acute Toxicity:

LD/LC50 Values Relevant for Classification:	80-62-6 Methyl Methacrylate	Oral: LD50 >5,000 mg/kg (rat)
		Inhalative: LD50 7093 ppm/4h mg/kg (rat)
	Aromatic Urethane Acrylate:	Oral: LD50 2500 mg/kg rat (lit.)
		Dermal: 4000 mg/kg rab (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:

Aquatic Toxicity:

Type of Test:

Toxicity to Fish:	Effective Concentration Method	Assessment
(MMA)	LC-50 > 79mg/l	OECD 203
	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:

Water hazard Class I (German Regulation) (Assessment by list): Slightly hazardous for water. Do not allow product to reach ground water, water course or sewage system.

**SECTION XIII.****Disposal Considerations**

## Product Recommendation:

Must be specially treated adhering to official regulations. Must not be disposed together with household garbage. Do not allow product to reach ground water, water course or sewage system.


European Waste Catalogue: (08 01 11) waste paint and varnish containing organic solvents or other dangerous substances.

## Uncleaned Packaging:


Recommendation: Packaging that may not be cleaned are to be disposed of in the same manner as the product.

**SECTION XIV.****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, mixture		

## 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, mixture		

## 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, mixture		

**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

## 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 % NK 75-100  
 Water Hazard Class: Water hazard class 2 (Self-assessment): Hazardous for water.

The data herein relates to the product named and is based upon information that Dental Ventures of America, 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.