



Ruthinium®
Group

Dental Manufacturing S.p.A.



SAFETY DATA SHEET

DDR/7231/50/16

Updating: revision 3 of 01/11/2006

1. IDENTIFICATION OF DANGEROUS SUBSTANCES AND IDENTIFICATION OF THE COMPANY

Name of the product: **ACRY POL R LIQUID**
Code of the products: 083/2-086/2-088/3-089/6-089/7-089/8-089/9-CAMP/081
For this product is recommended the dentistry use only.

Supplier: **Dental Manufacturing S.p.A.**
Via Ca' Mignola Nuova, 1699 - 45021 Badia Polesine (RO)
Phone 0425/51628-590587 Technical Assistance: 0425/590587
Website www.ruthinium.it E-Mail info@ruthinium.it

Urgent calls phone number of the Company and / or official consulting body: Niguarda Hospital Tel.: 02/66101029.

2. INFORMATION ON COMPOSITION AND SUBSTANCES

Composition of the compound: Mixture of methy/ethyl-methacrylate

Health dangerous materials according to provision 67/548/CEE and further adaptations for which there exist the well known limits of exposition:

Quantity	N.67/548/CEE	CAS	EINECS	Name / Classification
80%-99%	607-035-00-6	80-62-6	201-297-1	Methyl methacrylate F Xi R11 R37/38 R43
Inf. To 2%	607-114-00-5	97-90-5	202-617-2	Ethylen dymethacrylate Xi R37 R43

3. IDENTIFICATION OF DANGERS

Classification of the compound: The product is classified as IRRITANT and HIGHLY FLAMMABLE

Chemical – Physical dangers: The compound is Highly flammable when exposed to inflammation sources even at temperatures below to 21 °C.

Negative effects on health: When inhaled the product causes irritation to the respiratory apparatus, when in contact with skin it causes large inflammation with erythemas, eschars or edemas furthermore it can cause cutaneous sensitization

Negative effects on environment: No particular danger can be found in normal utilization.

4. FIRST AID

General Dispositions: On doubt or when considered it necessary contact a doctor .and bring along the safety data sheet. Do not give any substance by mouth to unconscious persons.

Skin contact: Take the polluted clothes off. Wash with water and soap those parts of the body polluted by the product.

Eyes contact: Flush with water for at least 10 minutes.

Ingestion: Do not cause vomit. GET MEDICAL HELP IMMEDIATELY. It is possible to give vegetal coal with water or medical vaseline oil.

Inhalation: Carry to open air. Move the patient away from the polluted room and reach an aired place.GET MEDICAL HELP.

5. FIREFIGHTS MEASURES

Suggested fire extinguisher: In case of fire utilize nebulized water or resistant foam.

Small fires: utilize water, extinguisher powder or carbon dioxide.

Forbidden exstinguisher: None.

Risks of combustion: Avoid breathing smokes.

Measures of protection: Utilize protections for breathing organs. Cool with water the disposables exposed to fire.

6. ACCIDENTAL RELEASE MEASURES

Individual precautions: Wear mask , gloves and protected clothes.

Environmental precautions: Contain wastes with sand or soil. Eliminate free flames and all possible ignition sources. Do not smoke. If the product has flew down to courses of water or sewers, or it has contaminated the ground or the vegetation, inform the competent authorities.

Cleaning: Avoid that the product reaches the sewers. Collect waste material for reuse, if possible, or for elimination. If necessary absorbe it though inert material. Subsequently to its collection, clean the area and all concerned materials with water.

Small extent waste: avoid the liquid's expansion through inert absorbent material (bentonite, vermiculite, etc.) and clean the polluted area.

Large extent waste: enclose and isolate the polluted area through absorbent inert material (bentonite, vermiculite, etc.) and move the poured out material in safe containers.

7. HANDLING AND STORAGE

Handling : Avoid contact with eyes and inhalation of fumes. See paragraph no. 8. While working do not eat, drink or smoke.

Incompatible materials: None in particular. See paragraph no. 10.

Storing: Store in original packagings. Keep away from free flames, heat sources. Avoid exposure to sunlight.

Particular use: For specific use of the product, refer to the specific information or contact the technical service of the Company.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Precautions dispositions: Ventilate the area in which the product is stored and / or manipulated.

Respiratory protection: The concentration levels in the air should be kept below the exposure limits. In the event of insufficient ventilation or prolonged exposure, wear gasproof masks equipped of filter for organic solvents fumes.

Hands protection: Use protective rubber gloves. Use protective gloves resistant to chemical agents. The choice of DPI for hands should be done according its best resistance to chemical agents, considering the results obtained on the test effected according disposition EN374.

Eye protection: Protective glasses.

Skin protection: Wear complete protective skin clothes.

Exposition limits of contained substances: mathacrylate of methyl TLV TWA: 100 ppm,A4-410 mg/m3,A4

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: colourless liquid

Odor: Ester

pH:	n.a
Fusion temperature:	n.d
Boiling temperature:	100,3°C
Inflammability temperature:	10°C
Self-inflammability:	n.d.
Explosion properties	Absent
Burning properties:	Absent
Vapor pressure:	n.d.
Relative density:	0,94 g/cm ³
Water-solubility:	Insoluble
Liposolubility:	Miscible with the main organic solvents
Division factor	
(n-ottanolo/water a) :	log pow 1.38
Vapors density:	> 1 a 20°C

10. STABILITY AND REACTIVITY

Conditions to avoid: Stable in normal conditions. Do not exceed the temperature of 30°C. With the presence of free radicals (as peroxide of metallic ions) the product may polymerize spontaneously developing heat.

Materials to avoid : Avoid the contact with comburent materials. The product could flare up.

Hazardous decomposition products: Further to thermic decomposition (for temperatures >240 °C) it may generate monomer fumes of methyl-methacrylate potentially dangerous to health.

11. TOXICOLOGICAL INFORMATION

Toxicological information on the compound are not known. However the concentration of each single substance must be taken into consideration in order to value toxicological effects further to the compound's exposure.

Below we indicate the toxicological information relative the main substances present in the compound:

methacrylate of methyl

Ingestion LD50/oral/ on rat: 7,8-9-4g/kg.

Inhalation CL50/inhalation/4 hours/on rat – 7093 ml/m3

Here below we indicate the main effects coming from the exposure to the product:

Skin contact: Irritant. May cause sensitisation by continuous skin contact.

Eye contact: irritant. It causes eye irritations.

Ingestion: irritant. It causes irritations to the mouth and to the gastroenteric tract.

Inhalation: irritant for the breathing apparatus.

12. ECOLOGICAL INFORMATION

General ecological information: to be used according proper working indications avoiding to disperse the product in the environment.

Ecotoxicity: the product does not have significant inhibiting effects on microorganisms and under proper conditions it can be sent to the implants of waste treatment. Avoid to introduce concentrate solution of the product in the water filtering system. The PH must be between 5.5 and 9.5.

Ecotoxicological information are not available on the compound, here below we indicate the information relative the substances contained in it.

Methyl methacrilate

High water toxicity:

CE(l)50, 48h (Dafnia)=>69 mg/l

CL50, 96 h (fishes)=>79-560 mg/l

CL50, 96h (seaweeds)=> 170mg/l

Mobility: The compound is insoluble in water. In soil and sediments it presents a feeble absorption.

Persistence and degradability: the compound does not contain surface-actives. Organic substances can be eliminated in normal plants of reflowed water.

Bioaccumulation potential: it is not cumulative.

13. DISPOSAL CONSIDERATIONS

For the compound's manipulation follow all precautonal protection measures as described in paragraph 8.

Compound's disposal: Recover if possible. Send the compound to authorized disposal's plants or to incinerators under controlled conditions. Follow local and national dispositions.

Packagings' disposal: Reclaim all packagings before effecting the disposal or the recycling system by rinsing them with water, recovering, when possible, the washing solutions and behave as above described. Empty and cleaned packagings can be reutilized, recycled or eliminated according to the dispositions in force.

14. TRANSPORT INFORMATION

Goods are classified as dangerous from the international transport dispositions.

ADR-Number ONU:	1247
ADR-Class:	3
ADR-Shipping Name:	methylmethacrylate, monomer, stabilized
ADR-Packaging Group:	II

IMDG-Number ONU:	1247
IMDG-Class:	3
IMDG-Technical name:	Methylmethacrylate, monomer, stabilized
IMDG-Packaging Group:	II
IMDG-EMS:	F-E, S-D

15. REGULATORY INFORMATION

Hazardous labelling according to dispositions 67/548/CEE (xxlx adjustment) and 1999/45/CE and further modifications and adjustments. Italian normative: D.Lgs. 14/03/2003 no. 65 (Classification and Labelling) and further adjustments.

Symbols:

Xi irritant
F Highly flammable

Sentences R:

R11 Highly flammable
R37/38 Irritating to respiratory system and skin.
R43 May cause sensitisation by skin contact.

Sentences S:

S16 Keep away from sources of ignition – No smoking.
S43 In case of fire, use foam, CO₂, powder.
S24 Avoid contact with skin.
S37 Wear suitable gloves.

Contains:

Ethylene dimethacrylate
Methyl methacrylate

16. OTHER INFORMATION

The present data sheet has been edited according to the normative 91/155/CE as it has been modified by normative 93/112/CE and by normative 2001/58/CE.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold
ACGIH - Threshold Limit Values - 1997 edition

All information contained in the present data sheet is correct and processed at best of our knowledge at the date above indicated. They solely refer to the indicated product and do not have to be considered as a guarantee of particular qualities.

We recommend to verify all regulations applicable to the specific utilization of the product.

The present data sheet cancel or replace any previous edition.

Text of sentences R utilized in paragraph 2:

R11 Highly flammable.
R37/38 Irritating for breathing apparatus and skin.
R43 can cause skin sensitization for contact.
R37 Irritating to respiratory system.

Legend: n.a. not applicable, n.d. not available.