

Safety Data Sheet

OkaGel™ (Liquid) - Irgacure

SECTION 1. IDENTIFICATION

Product Name: OkaGel™ (Liquid) - Irgacure

Chemical Name: Gelatin Methacrylate (GelMA)

Recommended Use: Intended for use in laboratory settings, cell encapsulation, and 3D bioprinting

Restrictions on Use: Not intended for consumption or live human testing

Company Name: GelMA Biotechnologies Ltd.

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SECTION 2. HAZARD IDENTIFICATION

Classification: not hazardous

Label Elements: N/A

Other Hazards: None known

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration	Common name / Synonyms	Other identifiers
Gelatin Methacrylate	2280018-77-9	5-30%	GelMA, Gelatin Methacryloyl	300 g Bloom , 80% degree of substitution
Water	7732-18-5	70-95%		
2-Hydroxy-4'-(2-hydroxyethoxy)-2-methylpropiophenone	106797-53-9	0.5%	2959 Irgacure	
Sodium Chloride	7647-14-5	<1%	Table salt	
Disodium phosphate	7558-79-4	<1%	Sodium hydrogen phosphate	
Potassium phosphate	7778-77-0	<1%		
Potassium chloride	7447-40-7	<1%		

SECTION 4. FIRST-AID MEASURES

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration and obtain medical attention

Skin Contact: wash contact area with soap and water.

Eye Contact: Flush eyes with running water.

Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

Most Important Symptoms and Effects, Acute and Delayed: No known adverse health effects of product.

Immediate Medical Attention and Special Treatment: N/A

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: No data available

Specific Hazards Arising from the Product: N/A

Special Protective Equipment and Precautions for Fire-Fighters: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: Use standard laboratory personal protective equipment (gloves, lab coat, protective eyewear).

Methods for Containment and Cleaning Up: Use warm water to help remove OkaGel™ residue.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling: Handle in area with appropriate exhaust ventilation. Avoid exposure to bare skin and eyes.

Conditions for Safe Storage: Product is light and moisture sensitive. Keep container tightly closed and away from direct sunlight. Recommended storage temperature 5°C.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Individual Protection Measures

Eye/Face Protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands

Respiratory Protection: Respiratory protection is not required. As a precaution use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).



SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colourless, clear gel.

Odour: Odourless.

pH: 7.2 at 25 °C

Melting Point and Freezing Point: No data available

Initial Boiling Point and Boiling Range: No data available

Flash Point: No data available

Evaporation Rate: No data available

Flammability (solid, gas): N/A

Relative Density (water = 1): 1

Solubility in Water: Water dispersion and solution

Solubility in Other Liquids: No data available

Auto-ignition Temperature: No data available

Decomposition Temperature: No data available

Viscosity: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical Stability: Stable under recommended storage conditions (Section 7).

Possibility of Hazardous Reactions: No data available

Conditions to Avoid: Temperatures below freezing and above 60 ° C.

Incompatible Materials: Strong Oxidizing agents, amines, free radical initiators.

Hazardous Decomposition Products: Hazardous decomposition products formed under fire conditions. – Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation Skin contact Eye contact Ingestion

Acute Toxicity

LC50: No information available

Skin Corrosion / Irritation: No data available

Serious Eye Damage / Irritation: No data available

STOT (Specific Target Organ Toxicity) - Single Exposure: No data available

Aspiration Hazard: No data available

STOT (Specific Target Organ Toxicity) - Repeated Exposure: No data available

Respiratory and/or Skin Sensitization: No Sensitizing effects known

Carcinogenicity: No data available

Reproductive Toxicity: No data available



Germ Cell Mutagenicity: No data available

Additional Information: RTECS: LX8580000

Notes: Product not yet fully tested, based on studies conducted on similar products and the structure of this one, it is assumed the product is unclassified.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity No data available

Persistence and Degradability: No data available

Bioaccumulative potential: Bioaccumulation is deemed unlikely Potential

Mobility in Soil: No data available

Other Adverse Effects: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods: Offer surplus, non-recyclable solutions, and empty containers to a licensed disposal company.

SECTION 14. TRANSPORT INFORMATION *(section heading must appear; all content is optional)*

Regulation	UN No.	Proper Shipping Name	Technical Name (for N.O.S. entry)	Transport Hazard Class(es)	Packing Group
unregulated	N/A	N/A	Gelatin Methacrylate	N/A	N/A

Environmental Hazards: No data available

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: N/A

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations: N/A

SECTION 16. OTHER INFORMATION

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