

# 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.

**Telephone Number:** (778) 583-6016

**Email:** info@okasciences.com

### 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

**Date of Latest Revision:** 1 December, 2022

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