SECTION 1: IDENTIFICATION

PRODUCT IDENTIFIER

Product Name : Heat Curable, Crosslinked Methyl Methacrylate Monomer

Product Code : J-572

Intended Use(s) : Crosslinked acrylic monomer for ocular prosthetics

CONTACT INFORMATION FOR SUPPLIER OF SAFETY DATA SHEET

Factor II, Incorporated PO
Box 1339
5642 White Mountain Ave Lakeside
AZ 85929
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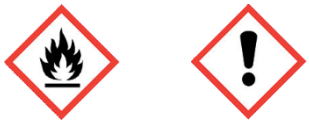
EMERGENCY TELEPHONE NUMBERS
Factor II, Incorporated 928 368 7502

SECTION 2: HAZARD(S) IDENTIFICATION

Classification of the substance or mixture
Hazard Class – Physical, Health, Environmental

Flammable Liquid	**2**
Skin Corrosion/Irritation	**2**
Skin Sensitizer	**1**
Specific Target Organ Toxicity - Single Exposure	**3**

Label Elements - Pictograms, Signal Word, Hazard Statements, Precautionary Statements, & supplemental Information



Signal word Danger

Hazard statements:

Hazards Statements
H225 Highly flammable liquid and vapour
H315 Causes skin irritation
H317 May cause an allergic skin reaction

H335 May cause respiratory irritation

Precautionary statements :

P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking Keep container tightly closed. Keep cool.
P233 Keep container tightly closed
P240 Ground and bond container and receiving equipment
P241 Use explosion-proof Electrica l/ ventilating / light /…/ equipment
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P264 Wash hands and exposed skin thoroughly after Handling
P272 Contaminated work clothing should not be allowed out of the workplace
P280 Wear protective gloves/protective clothing/eye protection/face protection
P321 Specific treatment (see … on this label)
P362 Take off contaminated clothing and wash before reuse
P363 Wash contaminated clothing before reuse
P302+P352 IF ON SKIN: Wash with soap and water
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water / shower
P332+P313 If skin irritation occurs: Get medical advice / attention
P333+P313 If skin irritation or a rash occurs: Get medical Advice / attention
P370+P378 In case of fire: Use CO2 for extinction
P403+P235 Store in a well ventilated place. Keep cool
P501 Dispose of contents/container to an authorized disposal facility

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Name	Product Identifier	%	GHS-US classification
Methyl Methacrylate	(CAS No) 80-62-6	90-100	Skin Corrosion/Irritation 2 (H315) Skin Sensitizer 1 (H317) Specific Target Organ Toxicity - Single Exposure 3 (H335)
Ethylene Glycol Dimethacrylate	97-90-5	1-5	Skin Sensitizer 1 (H317) Specific Target Organ Toxicity - Single Exposure 3 (H335)

SECTION 4: FIRST-AID MEASURES

General Advice

Provide the SDS to medical personnel for treatment.

Inhalation:
Remove victim to fresh air. Seek immediate medical attention.

Eye Contact:
If product gets in the eyes, flush with lukewarm water for at least 15 minutes. If irritation occurs, contact a physician.

Skin Contact:
Rinse thoroughly with lukewarm water, followed by a thorough washing of the affected area with soap and water. If irritation, redness or swelling persists, contact a physician immediately.

Clothing:
Remove contaminated clothing, wash thoroughly before reuse.

Ingestion:
If ingested, do not induce vomiting. If product has been swallowed, drink plenty of water or milk IMMEDIATELY. If the patient is vomiting, continue to offer water or milk. Never give anything by mouth to an unconscious person. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed. Get medical attention immediately.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Chemical (alcohol-resistant) foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media
Water spary or water stream may not be effective.

Specific Hazards Arising from the Chemical
High temperatures, inhibitor depletion, accidental impurities, or exposure to radiation or oxidizers may cause spontaneous polymerizing reaction generating heat/pressure. Closed containers may rupture or explode during a runaway polymerization. This product is a flammable liquid. Vapors of this product are heavier than air and may travel to a source of ignition and flash back to a leaking or open container. Vapor forms an explosive mixture with air.

Hazardous Combustion Products
Acrid smoke-fumes/carbon monoxide/carbon dioxide and perhaps other toxic vapors may be released during a fire involving this product.

Special Fire Fighting Procedures:
Use a water spray or fog to reduce or direct vapors, and keep containers cool. Water may not be effective in actually extinguishing a fire involving this product. Do not enter fire area without proper protection. Fight fire from a safe location. Structural firefighters must wear SCBAs and full protective equipment. Heat/impurities may cause pressure to build and/or rupture closed containers, spreading fire, increasing risk of burns/injuries.

Protective Equipment and Precautions for Firefighters
Wear self-contained breathing apparatus for firefighting if necessary. Do not enter fire area without

proper protection. Fight fire from safe distance/protected location. Heat/impurities may increase temperature/build pressure/rupture closed containers, spreading fire, increasing risk of burns/injuries. Use water spray to cool unopened containers. Pressure relief system may plug with solids creating risk of overpressure.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions
Before cleaning any spill or leak, individuals must wear appropriate Personal Protective Equipment that is specified in section 8. Deny entry to all unprotected individuals. Remove any contaminated clothing and wash thoroughly before reuse.

Environmental Precautions
Extinguish all ignition sources. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water. May contaminate water supplies/be harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

Methods and Material for Containment and Cleaning Up

Methods for Containment
Prevent further leakage or spillage if safe to do so. Dike and contain spill with inert material (e.g. sand or earth). May contaminate water supply.

Methods for Cleaning Up
Maximize ventilation (open doors and windows) and secure all sources of ignition. Use good, local ventilation with a minimum capture velocity of 100 ft/min (30 m/min) at point of product release. Place into appropriate closed container(s) for disposal in accordance with local, state and federal regulations. Wash all affected areas with plenty of warm water and soap.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling
Keep away from heat, sparks, and flame. Keep container closed after each use. Do NOT use localized heat source such as band heaters to heat/melt product. Do NOT use steam. Hot boxes or hot rooms are recommended for heating the product, which can be set at a maximum temperature of 60ºC/140ºF. Avoid contact with skin, eyes and clothing. Use good personal hygiene and housekeeping. After use, wash hands and exposed skin with soap and water. Do not eat, drink, or smoke while handling product. Observe precautions found on label. Keep away from heat, sparks, and flame. Keep container closed after each use. Ground and bond all containers when transferring. Refer to Section 8 for suggested exposure controls and personal protection. Observe precautions found on label

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions
Store containers in a cool, dry location, away from direct sunlight, heat, sparks, flame, other light sources, or sources of intense heat. Store in accordance with National Fire Protection Association recommendations. Check inhibitor levels periodically, adding to the bulk material if needed. Maintain at a minimum, the original 2-inch headspace in the product container and do not blanket or mix with oxygen-free gas as it renders the inhibitor ineffective. Vapors are uninhibited and may form polymers in vents or flame arresters, resulting in blockage of vents. Product residue may remain in empty containers. Observe all label precautions until the container is cleaned, reconditioned, or destroyed.

Incompatible Materials
Strong oxidizers, strong reducers, free radical initiators, inert gases, oxygen scavengers.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Methyl Methacrylate 80-62-6	100 ppm TWA; 410 mg/m3 TWA	100 ppm STEL 50 ppm TWA	NIOSH: 100 ppm TWA; 410 mg/m3 TWA
Ethylene Glycol Dimethacrylate 97-90-5			

Engineering Controls
Use local explosion-proof ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Personnel Protective Equipment (PPE)

Respiratory Protection
A respirator should be worn whenever workplace conditions warrant a respirators use. None required if airborne concentrations are maintained below the exposure limit listed above. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR §1910.134 or other appropriate governing standard.

Eye/Face Protection
Wear safety glasses, chemical goggles when splashing is possible, when dealing with this material. If necessary, refer to U.S. OSHA 29 CFR §1910.133, or other appropriate governing standard. Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes.

Skin and Body Protection
Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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.

Full contact:	Splash contact:
Material:	Nitrile rubber
Minimum layer thickness:	0.4 mm Minimum layer thickness: 0.11 mm
Break through time:	480 min Break through time: 120 min

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. An eyewash station and a safety shower are recommended. Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Wash hands thoroughly before eating, drinking, or smoking.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear	**Physical State: Liquid**
Odor: Acrid Odor	**Flash Point: 54 F,12 C**
Flammable Limit (Air Volume%, 0% Lower/Upper)	**Autoignition Temperature: 421°C**
Evaporation Rate	**Boiling Range (low - high) 101°C**
Specific Gravity 1.052698065	

SECTION 10: STABILITY AND REACTIVITY

Note: Materials listed as stable may become unstable up depletion of inhibitors (such as mequinol or hydroquinone), contact the manufacturer for exact levels and instructions on inhibitor maintenance.

Material stability
Stable

Incompatible materials
Strong oxidizers, strong reducers, free radical initiators, inert gases, oxygen scavengers. Material has strong solvent properties and can soften paint and rubber.

Hazardous decomposition products
Oxides of Carbon

Possibility of hazardous reactions
Hazardous polymerization may occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Mixture Toxicity
Inhalation Toxicity: 4,876mg/L

Component Toxicity

Routes of Exposure
No data available

Target Organs
Eyes Skin Respiratory System

Effects of Overexposure

Product Components Listed as Carcinogenic

Cas Number	Description	%weight	Carcinogen Rating
None			No Data Available

SECTION 12: ECOLOGICAL INFORMATION

Component Ecotoxicity

Methyl Methacrylate 96 Hr LC50 Pimephales promelas: 243 - 275 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 125.5 - 190.7 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 170 - 206 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 153.9 - 341.8 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: >79 mg/L [flowthrough]; 96 Hr LC50 Oncorhynchus mykiss: >79 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 326.4 - 426.9 mg/L [static] 48 Hr EC50 Daphnia magna: 69 mg/L 96 Hr EC50 Pseudokirchneriella subcapitata: 170 mg/L

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes
It is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste. When discarded as shipped it is a hazardous waste by the EPA under RCRA. After addition of excess inhibitor, dispose waste material in accordance with Federal, State, and Local regulations. Comply with all applicable federal, state and local regulations. Waste disposal options include landfilling solids at permitted sites. Incinerate in a chemical incinerator equipped with an afterburner and scrubber. Use registered transporters.

Contaminated Packaging
Reuse of empty drums or containers is not recommended. Employees should be advised of the potential hazards, due to residual flammable material, associated with empty containers. Dispose of all empty containers properly, in accordance with Federal, State and Local regulations

SECTION 14: TRANSPORT INFORMATION

Agency	Proper Shipping Name	UN Number	Packing group	Haz. class
DOT	METHYL METHACRYLATE MONOMER, STABILIZED RQ: MMA=1000	UN1247	II	3
IATA	METHYL METHACRYLATE MONOMER, STABILIZED	UN1247	II	3
IMDG	METHYL METHACRYLATE MONOMER, STABILIZED	UN1247	II	3

SECTION 15: REGULATORY INFORMATION

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin: - None

SARA 313
Methyl Methacrylate 80-62-6

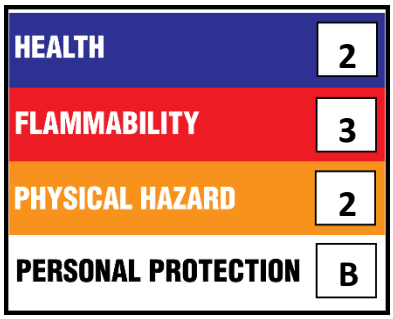
US State Right-to-Know Regulations
- None

Country	Regulation	All Components Listed
	Canada DSL	Yes
	EINECS	Yes
	SARA Hazard categories	No
	TSCA Inventory	Yes

California Prop. 65
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

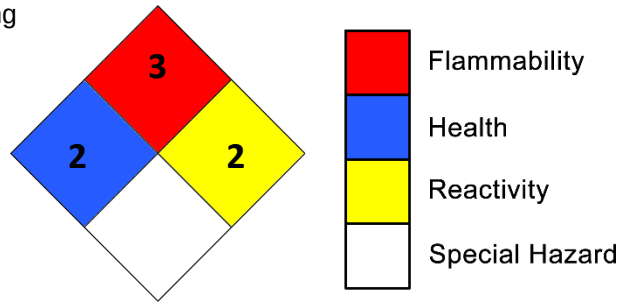
SECTION 16: OTHER INFORMATION

Hazardous Material Information System (HMIS)



HMIS & NFPA Hazard Rating Legend
* = Chronic Health Hazard
0 = INSIGNIFICANT
1 = SLIGHT
2 = MODERATE
3 = HIGH

National Fire Protection Association (NFPA)



DISCLAIMER / STATEMENT OF LIABILITY:
This is to certify that the above designated material has been tested and did comply with the listed specifications (with listed exceptions) when supplied in original container. The material is subject to the conditions listed on the invoice. The above is a copy of information on file. The lot acceptance data are available for examination. This is a computer-generated document that is valid without a signature. The information above is supplied in good faith and, to the best of our knowledge, is based on available sources believed to be reliable and accurate. This document and any information provided herein are for your guidance only. The use by the requestor is beyond Factor II control; therefore, the responsibility for appropriate and safe use of the above information lies with the End user. Factor II shall not be responsible for any misuse and/or misapplication of the information in this document.

Factor II, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology and/or fire prevention as necessary or appropriate to the

use and understanding of the data contained in this SDS. To promote safe handling each customer or recipient should 1) notify and furnish its employees, agents, contractors, customers and/or others whom it knows or believes will use this material of the information regarding hazards or safety, and 2) request its customers to notify their employees, customers and other users of the product of this information.