

SAFETY DATA SHEET

Effective Date 1/1/2021

Version 4

1. IDENTIFICATION

Product Identifier

Product Name FAST CURE ACYLIC HARDENER

Other means of identification

CAT# M145/M146

Recommended use of the chemical and restrictions on use

Recommended Use Self-curing acrylic resin

Details of the supplier of the safety data sheet

Supplier Address METLAB CORPORATION
4011 HYDE PARK BLVD
NIAGARA FALLS NY 14305

Emergency telephone number

Company Phone Number +800-828-6866

Emergency Telephone (INFOTRAC) +800-255-3924

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Flammable liquids	Category 3
Skin corrosion/irritation	Category 2
Skin sensitization	Category 1
Serious eye damage / eye irritation	Category 2A
STOT Single exposure	Category 3
Hazardous to the aquatic environment- Acute hazard	Category 1

Signal word Warning

Hazard statements H226 Flammable liquid and vapor.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.



Appearance Colorless to slightly yellow liquid

Physical state Liquid

Odor Acrid

Precautionary Statements – Prevention

P210 Keep away from heat/sparks/open flames/hot surface. – No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

Isocryl Liquid 054 v.4

- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P261 Avoid breathing dust.
- P264 Wash face, hands and any exposed skin thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements – Response

- P302+P352 IF ON SKIN: Wash with plenty of water.
- P303+P361+P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P362 Take off contaminated clothing and wash it before reuse.
- P370+P378 in case of fire: Use CO₂, dry chemical or foam for extinction.

Precautionary Statements – Storage P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

Precautionary Statements – Disposal P501 Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight - %
Iso-Butyl methacrylate	97-86-9	< 90
Trimethylolpropane Trimethacrylate	3290-92-4	< 20

Impurities and stabilizing additives Standard grades contain inhibitors from among the following: 1000 ppm Maximum p-Methoxyphenol (CAS No. 150-76-5)

4. FIRST AID MEASURES

First aid measures

- General advice** If exposed or concerned, get medical advice or attention.
- Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
- Eye contact** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.
- Ingestion** Do NOT induce vomiting. Rinse mouth. Get medical attention. Never give anything by mouth to an unconscious person.
- Skin Contact** Wash off immediately with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs, get medical advice/attention.

Most important symptoms and effects, both acute and delayed

Symptoms Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation. May cause an allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable: In case of fire, use water spray, chemical foam, carbon dioxide (CO₂), dry chemical for extinction. Keep containers cool by spraying with water if exposed to fire.

Unsuitable: Do not use water jet.

Specific hazards arising from the chemical Flammable liquid and vapor. May polymerize on heating. Sealed containers may rupture explosively if hot.

Special protective equipment and precautions for fire fighters In case of fire, wear self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Eliminate sources of ignition. Wear protective gloves and eye/face protection. Avoid breathing vapors.

Environmental precautions Avoid release to the environment. Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

Methods and material for containment and clean-up

Method for containment Collect spillage. Do not adsorb onto sawdust or other combustible materials. Transfer to a container for disposal or recovery. Use only non-sparking tools.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Do not eat, drink or smoke at the work place. Wash thoroughly after handling. Avoid breathing vapors. Use only outdoors or in a well-ventilated area. The vapor is heavier than air; beware of pits and confined spaces. Ground container and receiving equipment. Use explosion proof electrical equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed. Store in a well-ventilated place. Keep cool. Keep away from heat, sparks, open flame, hot surfaces – No smoking. Protect from sunlight.
IMPORTANT: Methacrylates stored in bulk must be kept in contact with air (oxygen). Monomer vapors are uninhibited and may form polymers in vent or flame arresters, resulting in blockage of vents.

Incompatible materials Polymerization catalysts, such as peroxy or azo compounds, strong acids, alkalis and oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required. The following information is given as general guidance.

Chemical Name	OSHA PEL	ACGIH TWA	ACGIH STEL	COMPANY STD. TWA	COMPANY STD. STEL
Iso-butyl methacrylate	NE	NE	NE	50 ppm	100 ppm

Appropriate engineering controls

Engineering controls Do not eat, drink or smoke at the work place. Provide adequate ventilation, including appropriate local extraction, to ensure that the occupational exposure limit is not exceeded. Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

Individual protection measures, such as personal protective equipment

Eye / face protection Wear approved safety goggles. Wear coverall chemical splash goggles and face shield when possibility exists for eye and face contact due to splashing or spraying material.

Skin and body protection Wear protective gloves for splash and immersion protection. Suitability of gloves should be confirmed with glove manufacturer. Change gloves, if contamination occurs or duration of activity exceeds breakthrough time. Breakthrough time of the glove material: refer to the information provided by the gloves' producer.

Respiratory protection None needed under normal use conditions. Wear suitable respiratory protective equipment if exposure to levels above the occupational exposure limit is likely. A suitable mask with filter A may be appropriate. In the event of formation of particularly high levels of vapor a self-contained breathing apparatus may be appropriate.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Colorless to slightly yellow liquid	Physical state	Liquid
Color	Clear to slightly yellow	Odor	Acrid
Flash point	42.5-45.5°C / 139°F	Specific gravity	.901
Evaporation rate	Not determined		
Flammability limits in air – Lower/Upper	Not established		
Autoignition temperature	Not established		

10. STABILITY AND REACTIVITY

Reactivity Will exothermically polymerize in the presence of initiators.

Chemical stability Stable in the presence of inhibitor.

Possibility of hazardous reactions None under normal processing

Hazardous reactions Susceptible to polymerization initiated by prolonged storage or the presence of catalyst.

Conditions to avoid Heat and direct sunlight.

Incompatible materials Polymerization catalysts, such as peroxy or azo compounds, strong acids, alkalis and oxidizing agents.

Hazardous decomposition products If heated to decomposition, CO and CO₂ may be produced

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product information

Inhalation May cause drowsiness and dizziness.

Eye contact Causes severe eye irritation.

Skin contact Causes skin irritation. Repeated and/or prolonged contact may cause dermatitis.

Ingestion Low oral toxicity, but ingestion may cause irritation of the gastrointestinal tract.

Component information

Chemical Name	ORAL LD50	DERMAL LD50	INHALATION LC50
Iso-Butyl Methacrylate 97-86-9	>9590 mg/kg	>17760 mg/kg	Vapor 5026 ppm (29.74 mg/L) 290 min

Information on physical, chemical and toxicological effects

Symptoms May cause skin and eye irritation. May cause irritation to the mucous membranes and upper respiratory tract. Irritating to mouth, throat, and stomach if ingested.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization May cause an allergic skin reaction.

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Reproductive toxicity Not a developmental toxicant.

STOT – single exposure May cause respiratory irritation.

STOT – repeated exposure Not classified.

12. ECOLOGICAL INFORMATION

Ecotoxicity Vert toxic to aquatic life.

Chemical Name	Algae / aquatic plants	Fish	Crustacea
Iso-Butyl Methacrylate 97-86-9	EC50 Selenastrum capricornutum 72 h 16 mg/L EC50 Selenastrum capricornutum 72 h 16 mg/L	LC50 Rainbow trout 96 h mg/L Flow through 20mg/L	EC50 Daphnia magna 48 h > 29 mg/L

Persistence and degradability Material is readily biodegradable. 74% in 28 days

The chemical is substantially removed in biological treatment processes.

Bioaccumulation The chemical has moderate potential for bioaccumulation.

Mobility The chemical is predicted to have moderate mobility in soil.

13. DISPOSAL CONSIDERATIONS**Waste treatment methods**

Disposal of wastes Follow all local and national government regulations in disposing material or contaminated packaging.

Avoid release to the environment. Decontaminate empty drums before recycling.

For U.S. - Dispose of in accordance with federal, state and local regulations. Do not flush to surface or sanitary sewer system. Dispose of by incineration or in accordance with local regulations. Do not incinerate closed containers.

Contaminated Packaging Dispose of all empty containers in accordance with local and national government regulations.

14. TRANSPORTATION INFORMATION**DOT**

UN / ID No	UN1993
Proper shipping name	Flammable liquid, n.o.s. (Isobutyl methacrylate stabilized / Trimethylolpropane trimethacrylate solution)
Hazard Class	3
Packing Group	III

IATA

UN / ID No	UN1993
Proper shipping name	Flammable liquid, n.o.s. (Isobutyl methacrylate stabilized / Trimethylolpropane trimethacrylate solution)
Hazard Class	3
Packing Group	III

IMDG

UN / ID No	UN1993
Proper shipping name	Flammable liquid, n.o.s. (Isobutyl methacrylate stabilized / Trimethylolpropane trimethacrylate solution)
Hazard Class	3
Packing Group	III
Marine pollutant	No

15. REGULATORY INFORMATION

International Inventories

Iso-butyl methacrylate:

DSL Listed Canadian Domestic Substances List
EINECS Listed European Inventory of Existing Chemical Substances

US Federal Regulations

Iso-butyl methacrylate:

SARA 302 – Extremely Hazardous – Not Listed

SARA 311 / 312 Hazard Categories

Acute Yes
Chronic No
Fire Yes
Reactivity Yes
Pressure No

SARA 313 – Toxic Chemicals – Not Listed

US State Regulations

Iso-butyl methacrylate:

California Proposition 65 – Not Listed

16. OTHER INFORMATION

Effective Date 1/1/2019**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet