



MATERIAL SAFETY DATA SHEET

PART NUMBER 11 10 47 Acri-Kleer Liquid

SECTION 1 PRODUCT IDENTIFICATION AND MANUFACTURE

1.1 Other means of identification

SDS# 054
UN/ID No UN2283
Product description: Acri-Kleer Liquid

1.2 Recommended use of the chemical and restrictions on use

Product Use / Restriction: Self-curing acrylic resin

1.3 Details of the supplier of the safety data sheet

SUPPLIER: METPREP LTD.
Unit 1, Falkland Close
Charter Avenue
COVENTRY CV4 8AU
CONTACT: sales@metprep.co.uk

1.4 Emergency telephone number

TELEPHONE: 024 7642 1222

SECTION 2 SUBSTANCE HAZARD IDENTIFICATION

Classification

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 aqua life.

Label elements



Symbol

Appearance Clear to slightly tinted

Physical state Liquid

Odour Characteristic



Precautionary Statements – Prevention

- P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P242 Use only non-sparking tools.
- 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 hands thoroughly with soap and water 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 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.

SECTION 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)

SECTION 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 doctor/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 WAS 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.

SECTION 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 rupture explosively if hot.

Special protective equipment and precautions for firefighters

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

SECTION 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 vapours.

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.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Do not eat, drink, or smoke at the workplace. Wash thoroughly after handling. Avoid breathing vapours. 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. Store locked up. 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 vapours are uninhibited and may form polymers in vent or flame arresters, resulting in blockage of vents.

Incompatible materials Check inhibitor levels every 6 months and return to original level. Polymerization catalysts, such as peroxy or azo compounds, strong acids, alkalis, and oxidizing agents.

**SECTION 8****EXPOSURE CONTROL/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 TWA	ACGIH TWA	ACGIH STEL	Company Standard TWA	Company Standard STEL
Iso-Butyl methacrylate 97-86-9	Not established	Not established	Not established	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 spectacles/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 type 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.

SECTION 9**PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

Physical state	Liquid
Odour	Acrid
Appearance	Colourless to slightly yellow liquid
Color	Clear to slightly yellow
Flash point	42.5-45.5°C / 139°F
Evaporation rate	Not determined
Flammability limits in air	Not established
Upper/Lower limit	
Specific gravity	0.901
Autoignition temperature	Not established

**SECTION 10****STABILITY AND REACTIVITY PROPERTIES**

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 heating 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 CO ₂ may be produced.

SECTION 11**TOXICOLOGICAL INFORMATION**

Acute toxicity	
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 of 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.
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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 data	NOT developmental toxicant.
STOT – single exposure	May cause respiratory irritation.
STOT – repeated exposure	Not Classified.

SECTION 12**ECOLOGICAL INFORMATION**

Ecotoxicity	Very toxic to aquatic life.
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Chemical Name	Algae / aquatic plants	Fish	Crustacea
Iso-Butyl Methacrylate 97-86-9	EC50 Selenastrum Capircomutum 72h 16 mg/L EC50 Selenastrum Capircomutum 72h 16 mg/L	LC50 Rainbow trout 96 h mg/L Flow through 20mg/L	EC50 Daphnia magna 48h > 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 product has moderate potential for bioaccumulation.

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

SECTION 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.

SECTION 14 TRANSPORT 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

SECTION 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

SECTION 16

OTHER INFORMATION

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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.