

Preparation Date 2021/03/02

Safety Data Sheet (SDS)

Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier PATTERN RESIN – Liquid
 Product Code 210204-2
 Name of Supplier GC Corporation
 Address 76-1 Hasunuma-Cho, Itabashi-Ku, Tokyo, Japan, Postal code 174-8585
 Company Contact Quality Assurance department
 Phone Number 81-3-3965-1388
 Fax Number 81-3-3965-1276
 Restriction on Use Prohibit use by anyone other than qualified dentistry.

Prohibit use for purposes other than those written in this product IFU.

Prohibition of use of glass ionomer cement, methacrylate-based polymers, and methacrylate-based monomers in patients with a history of hypersensitivity symptoms such as rash and dermatitis.

Prohibition of use of silicone in patients with a history of hypersensitivity symptoms such as rash and dermatitis.

Surgeons / patients who have a rash, dermatitis, or other hypersensitivity to this product should discontinue use and seek medical attention immediately.

Section 2 – HAZARDS IDENTIFICATION

GHS Classification of the Chemical

Physicochemical Flammable liquids Category 2
 Health Hazards Acute toxicity (Inhalation: vapour) Category 4
 Skin corrosion/irritation Category 2
 Serious eye damage/eye irritation Category 2A
 Respiratory sensitization Category 1
 Skin sensitization Category 1
 Specific target organ toxicity (single exposure) Category 1 (respiratory apparatus)
 Specific target organ toxicity (single exposure) Category 3 (narcotic effect)
 Specific target organ toxicity (repeated exposure) Category 1 (respiratory apparatus nervous system)

Environmental Hazards Hazardous to the aquatic environment, short-term (acute) Category 3
 Other hazards than mentioned above are Not classified or Classification not possible.

GHS Label Elements

Pictograms



Signal Word Danger
 Hazard Statements H225 Highly flammable liquid and vapour
 H315 Causes skin irritation
 H317 May cause an allergic skin reaction
 H319 Causes serious eye irritation
 H332 Harmful if inhaled
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
 H336 May cause drowsiness or dizziness
 H370 Causes damage to respiratory apparatus
 H372 Causes damage to respiratory apparatus, nervous system through prolonged or repeated exposure

Precautionary Statements H402 Harmful to aquatic life

Prevention Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.(P210)

Keep container tightly closed.(P233)
 Ground and bond container and receiving equipment.(P240)
 Use explosion-proof electrical, ventilating and lighting equipment.(P241)

	Use non-sparking tools.(P242) Take action to prevent static discharges.(P243)
	Do not breathe dust/fume/gas/mist/vapours/spray.(P260) Avoid breathing dust/fume/gas/mist/vapours/spray.(P261) Wash hand thoroughly after handling.(P264) Wash eye thoroughly after handling.(P264) Do not eat, drink or smoke when using this product.(P270)
	Use only outdoors or in a well-ventilated area.(P271)
	Contaminated work clothing should not be allowed out of the workplace.(P272) Avoid release to the environment.(P273) Wear protective gloves/protective clothing/eye protection/face protection.(P280) Wear respiratory protection.(P284)
Response	IF ON SKIN: Wash with plenty of soap and water.(P302+P352) IF ON SKIN or hair: Take off immediately all contaminated clothing. Rinse skin with water or shower.(P303+P361+P353) IF INHALED: Remove person to fresh air and keep comfortable for breathing.(P304+P340) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.(P305+P351+P338)
	IF exposed or concerned: Call a doctor.(P308+P311)
	Call a doctor if you feel unwell.(P312) Get medical advice and attention if you feel unwell.(P314)
	Specific treatment.(P321) If skin irritation occurs: Get medical advice/attention.(P332+P313) If skin irritation or rash occurs: Get medical advice/attention.(P333+P313) If eye irritation persists: Get medical advice/attention.(P337+P313) If experiencing respiratory symptoms: Call a doctor.(P342+P311) Take off contaminated clothing and wash it before reuse.(P362+P364) In case of fire: Use appropriate media to extinguish.(P370+P378)
Storage	Store in a well-ventilated place. Keep container tightly closed.(P403+P233) Store in a well-ventilated place. Keep cool.(P403+P235)
Disposal	Store locked up.(P405) Dispose of contents and container in accordance with local, regional and national regulations (to be specified).(P501)

Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Distinction of Substance or Mixture

Mixture

Chemical Name or Generic Name	Concentration or Its Ranges	Formula	ENCs No./ISHL No.		CAS RN
			ENCs No.	ISHL No.	
Methyl methacrylate	60-70%	Confidential	Confidential	Existing	Confidential
Surface acting agent	Confidential	Confidential	Confidential	Confidential	Confidential
Tertiary amine	Confidential	Confidential	Confidential	Confidential	Confidential
Inhibitor	Confidential	Confidential	Confidential	Confidential	Confidential

Section 4 – FIRST AID MEASURES

Inhalation

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
If experiencing respiratory symptoms call a doctor.

Skin Contact

IF exposed or concerned: Call a doctor.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF ON SKIN: Wash with plenty of soap and water.

Eye Contact
 If skin irritation or rash occurs, get medical advice and attention.
 Specific treatment.
 IF exposed or concerned: Call a doctor.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical advice/attention.

Ingestion
 IF exposed or concerned: Call a doctor.
 Rinse mouth.
 IF SWALLOWED: Call a doctor if you feel unwell.
 IF exposed or concerned: Call a doctor.

Section 5 – FIRE FIGHTING MEASURES

Suitable Extinguishing Media
 Use extinguishing agent suitable for type of surrounding fire.
 When dust occurs, use dry sand.
 Cylindric water.

Unsuitable Extinguishing Media
 Risk of producing harmful gases such as carbon monoxide.
 Avoid inhalation of smoke or gases.
 Fight fire from upwind position if possible
 Keep away from sources of ignition and use appropriate extinguishing media.
 Prohibit unauthorized staff from entering the area around the fire.
 Keep unnecessary people away.
 Wear respiratory protection.

Specific Hazards in Case of Fire
 Specific Fire Fighting
 Use goggles in combination with dust mask, and another protections as appropriate to situation.

Special Protective Equipment and Precautions for Fire

Section 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures
 Wear respiratory protection.

Environmental Precautions
 Methods and Equipment for Containment and Cleaning Up
 Large spills :Evacuate area.
 Ensure adequate ventilation.
 Do not discharge into the drains, surface waters or ground water directly.
 small spill : absorb with material such as non-combustible material wash thoroughly after handling
 Large spills: Dike spills and dispose of in safe area.

Prevention Measures for Secondary Accidents
 Keep away from sources of ignition and prepare extinguishing media.
 Risk of slipping. Spilled material forms slippery floor.
 Do not recklessly walk on the spillage.

Section 7 – HANDLING AND STORAGE

Handling Technical Measures
 Please comply with this section and the contents of this product IFU.
 Provide ventilation system and use necessary personal protective equipment as described in "Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION".
 Ground/bond container and receiving equipment.
 Use only non-sparking tools.
 Use explosion-proof electrical/ventilating/lighting.
 Take precautionary measures against static discharge.
 Use local exhaust ventilation in case of production of fume or mist.
 Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Precautions for Safe Handling
 Wear protective gloves/eye protection/face protection.
 Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.
Use only outdoors or in a well-ventilated area.

Wear respiratory protection.
Contaminated work clothing should not be allowed out of the workplace.
Keep cool.
Do not breathe dust/fume/gas/mist/vapours/spray.

Storage	Prevents Handling of Incompatible Substances or	Refer to "Section 10 – STABILITY AND REACTIVITY".
	Conditions for Safe Storage	Refer to "Section 10 – STABILITY AND REACTIVITY". Store locked up. Store container tightly closed in well-ventilated place.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

	Exposure Limits (ACGIH)
Methyl methacrylate	TWA 50 ppm, STEL 100 ppm

Engineering Controls		Use local exhaust ventilation in case of production of fume or mist. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Personal Protective Equipment	Respiratory Protection	Use explosion-proof electrical equipment and prevent from static electricity. Wear respiratory protection.
	Hand Protection	Wear protective gloves.
	Eye/Face Protection	Wear eye protection/face protection.
	Skin and Body Protection	Wear protective clothing.

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State		liquid
Form		liquid
Colour		Colorless and transparent
Odour		Solvent odor
Melting Point/Freezing Point		-48°C
Boiling Point or Initial Boiling Point and Boiling Ranges		101.0000°C
Flammability		No data available
Lower and Upper Explosion Limit / Flammability Limit	Lower Limit	Not applicable
	Upper Limit	Not applicable
Flash Point		15.0000°C (unknown)
Auto-Ignition Temperature		No data available
Decomposition Temperature		No data available
pH		No data available
Kinematic Viscosity		No data available
Solubility		Not applicable
Partition Coefficient : n-Octanol/Water		No data available
Vapour Pressure		No data available
Density and/or Relative Density		No data available
Relative Gas Density		No data available
Particle Characteristics		No data available

Section 10 – STABILITY AND REACTIVITY

Reactivity	No information available
Chemical Stability	No information available
Possibility of Hazardous Reaction	No information available
Conditions to Avoid	No information available
Incompatible Substances or Mixtures	No information available

Hazardous Decomposition Products		No information available
Section 11 – TOXICOLOGICAL INFORMATION		
Acute Toxicity	Oral	Not classified. Classification not possible.
	Dermal	Not classified. Classification not possible.
	Inhalation	(gas) Does not fall under gas based on GHS definitions. (vapour) Category 4. (dust and mist) Unable to classify. Category 2.
Skin Corrosion/Irritation		Category 2A.
Serious Eye Damage/Eye Irritation		Category 1.
Respiratory Sensitization		Category 1.
Skin Sensitization		Unable to classify. Unable to classify. (Reproductive toxicity) Not classified. Classification not possible.
Germ Cell Mutagenicity		(Reproductive toxicity, effects on or via lactation)
Carcinogenicity		Unable to classify.
Reproductive Toxicity		Category 1(respiratory apparatus) . Category 3(narcotic effect).
Specific Target Organ Toxicity (Single Exposure)		Category 1(respiratory apparatus).
Specific Target Organ Toxicity (Repeated Exposure)		Category 1(nervous system).
Aspiration Hazard		Classification not possible.
Section 12 – ECOLOGICAL INFORMATION		
Hazardous to the Aquatic Environment, Short-Term (Acute)		Category 3.
Hazardous to the Aquatic Environment, Long-Term (Chronic)		Not classified. Classification not possible.
Ecotoxicity		No data available
Persistence		No data available
Bioaccumulative Potential		No data available
Mobility in Soil		No data available
Hazardous to the Ozone Layer		Unable to classify.

Section 13 – DISPOSAL CONSIDERATIONS

Residual Waste

Before disposal, make the wastes harmless, stabilized, and neutralized, and minimize danger and toxicity of the wastes.

Dispose of waste in accordance with local, state and federal regulations.

Contaminated Container and Packaging

Passed to a licensed waste contractor.

In case of disposal of empty containers, remove the content thoroughly.

This material is containing flammable materials. Be careful in case of incineration.

Section 14 – TRANSPORT INFORMATION

International Regulations

Regulatory Information by Sea

Conform to the provisions of IMO.

UN No.

1247

Proper Shipping Class

METHYL METHACRYLATE, MONOMER, STABILIZED
3

Packing Group

II

Marine Pollutant

Not applicable

Liquid Substance

Applicable

Transported in Bulk

According to

MARPOL 73/78, Annex II, the IBC Code

Regulatory Information by Air

Conform to the provisions of ICAO/IATA.

UN No.

1247

Proper Shipping Class

METHYL METHACRYLATE, MONOMER, STABILIZED
3

Packing Group

II

Regulations in Japan

Regulatory Information by Road

Complies with the Fire Service Act.

Regulatory

Conform to the provisions of the Ship Safety Law.

Information by Sea

UN No.

1247

Proper Shipping Class

METHYL METHACRYLATE, MONOMER, STABILIZED
3

Packing Group

II

Marine Pollutant

Not applicable

Liquid Substance

Applicable

Transported in Bulk

According to

MARPOL 73/78, Annex II, the IBC Code

Regulatory Information by Air

Conform to the provisions of the Civil Aeronautics Law.

UN No.

1247

Proper Shipping Class

METHYL METHACRYLATE, MONOMER, STABILIZED
3

Packing Group

II

Emergency Response Guide Number

129P

Section 15 – REGULATORY INFORMATION

It is recommended to consult the local regulations of the state/region to determine the identification as hazardous material.

Section 16 – OTHER INFORMATION

Information Contact

No information available

