

Preparation Date 2021/02/01

Safety Data Sheet (SDS)

Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier	OPTIGLAZE color (CHV, A+, B+, C+)
Product Code	201217-4
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.

Use for purposes other than those stated in the [Performance, Purpose of use, Efficacy or Effect] of the package insert is prohibited.

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.

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 1
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 Carcinogenicity Category 1A 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	Specific target organ toxicity (repeated exposure) Category 2 (kidney immunological system) 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	H224 Extremely 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
H350 May cause cancer
H370 Causes damage to respiratory apparatus
H372 Causes damage to respiratory apparatus, nervous system through prolonged or repeated exposure
H373 May cause damage to kidney, immunological system through prolonged or repeated exposure
H402 Harmful to aquatic life

Precautionary Statements

Prevention

Obtain special instructions before use.(P201)
Do not handle until all safety precautions have been read and understood.(P202)
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)

IF exposed or concerned: Get medical advice/attention.(P308+P313)
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.	
Silicon dioxide	Confidential	Confidential	Confidential	Confidential	Confidential
Methyl methacrylate	Confidential	Confidential	Confidential	Confidential	Confidential
Multifunctional methacrylate	Confidential	Confidential	Confidential	Confidential	Confidential
Photo initiator	Confidential	Confidential	Confidential	Confidential	Confidential
Pigment [Not included in OPTIGLAZE color (CHV)]	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.

Unsuitable Extinguishing Media

When dust occurs, use dry sand.
No information available

Specific Hazards in Case of Fire

Risk of producing harmful gases such as carbon monoxide. Avoid inhalation of smoke or gases.

Specific Fire Fighting

Fight fire from upwind position if possible
Keep away from sources of ignition and use appropriate extinguishing media.

Special Protective Equipment and Precautions for Fire

Prohibit unauthorized staff from entering the area around the fire.
Keep unnecessary people away.
Wear respiratory protection.

Use goggles in combination with dust mask, and another protections as appropriate to situation.

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

Prevention Measures for Secondary Accidents

Large spills: Dike spills and dispose of in safe area.

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 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	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. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing should not be allowed out of the workplace. Keep cool. Do not breathe dust/fume/gas/mist/vapours/spray.
	Prevents Handling of Incompatible Substances or Storage	Refer to "Section 10 – STABILITY AND REACTIVITY".
Storage	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	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		Clear, Tooth crown color (Brownish, Yellowish, Greyish)
Odour		Slight odor like ester
Melting Point/Freezing Point		No data available
Boiling Point or Initial Boiling Point and Boiling Ranges		No data available
Flammability		No data available
Lower and Upper Explosion Limit / Flammability Limit	Lower Limit	No data available
	Upper Limit	No data available
Flash Point		10°C

Auto-Ignition Temperature	421°C
Decomposition Temperature	No data available
pH	No data available
Kinematic Viscosity	No data available
Solubility	No data available
Partition Coefficient : n-Octanol/Water	No data available
Vapour Pressure	No data available
Density and/or Relative Density	1.2 g/mL
Relative Gas Density	No data available
Particle Characteristics	No data available
Other Data	Self-Accelerating Polymerization Temperature : 110° C (This product meets the requirement of SP386.)

Section 10 – STABILITY AND REACTIVITY

Reactivity	No information available
Chemical Stability	Stable under normal conditions of use.
Possibility of Hazardous Reaction	There is a risk of fire or explosion due to Conditions to Avoid and Incompatible Substances or Mixtures.
Conditions to Avoid	Heat Light
Incompatible Substances or Mixtures	Strong acid Strong base Peroxide Oxidant
Hazardous Decomposition Products	Carbon monoxide Carbon dioxide

Section 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity	Oral	Classification not possible
	Dermal	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 2
Serious Eye Damage/Eye Irritation		Category 2A
Respiratory Sensitization		Category 1
Skin Sensitization		Category 1
Germ Cell Mutagenicity		Unable to classify
Carcinogenicity		Category 1A
Reproductive Toxicity		(Reproductive toxicity)
		Unable to classify

(Reproductive toxicity, effects on or via lactation)

Specific Target Organ Toxicity (Single Exposure) Unable to classify
Category 1(respiratory apparatus)

Category 3(narcotic effect)

Specific Target Organ Toxicity (Repeated Exposure) Category 1(respiratory apparatus)

Category 1(nervous system)

Category 2(kidney)

Category 2(immunological 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) 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.

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

Packing Group 3

Marine Pollutant II

Not applicable

	Liquid Substance Transported in Bulk According to MARPOL 73/78, Annex II, the IBC Code	Applicable
	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	Not regulated
	Regulatory Information by Sea	Conform to the provisions of the Ship Safety Law.
	UN No.	1247
	Proper Shipping Class	METHYL METHACRYLATE, MONOMER, STABILIZED 3
	Packing Group	II
	Marine Pollutant	Not applicable
	Liquid Substance Transported in Bulk According to MARPOL 73/78, Annex II, the IBC Code	Applicable
	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
Other Property

Described in item 1

The information herein is given in good faith, but no warranty expressed or implied, is made.