

Preparation Date 2021/02/01

Safety Data Sheet (SDS)

Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier	OPTIGLAZE color (Ivory White, White)
Product Code	201217-3
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 kidney immunological 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	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, 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)

	<p>If skin irritation occurs: Get medical advice/attention.(P332+P313)</p> <p>If skin irritation or rash occurs: Get medical advice/attention.(P333+P313)</p> <p>If eye irritation persists: Get medical advice/attention.(P337+P313)</p> <p>If experiencing respiratory symptoms: Call a doctor.(P342+P311)</p> <p>Take off contaminated clothing and wash it before reuse.(P362+P364)</p> <p>In case of fire: Use appropriate media to extinguish.(P370+P378)</p>
Storage	<p>Store in a well-ventilated place. Keep container tightly closed.(P403+P233)</p> <p>Store in a well-ventilated place. Keep cool.(P403+P235)</p>
Disposal	<p>Store locked up.(P405)</p> <p>Dispose of contents and container in accordance with local, regional and national regulations (to be specified).(P501)</p>

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
Titanium dioxide	Confidential	Confidential	Confidential	Confidential	Confidential
Pigment [Not included in OPTIGLAZE color (White)]	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.

If skin irritation or rash occurs, get medical advice and attention.

Specific treatment.

IF exposed or concerned: Call a doctor.

Eye Contact

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	
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. Prohibit unauthorized staff from entering the area around the fire. Keep unnecessary people away. Wear respiratory protection.
Special Protective Equipment and Precautions for Fire	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	Large spills :Evacuate area. Ensure adequate ventilation.
Methods and Equipment for Containment and Cleaning Up	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.
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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

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
Titanium dioxide	TWA 10 mg/m ³ , STEL –

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.

Use explosion-proof electrical equipment and prevent from static electricity.

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

Ivory White, White

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	1.1 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) Classification not possible
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 1(respiratory apparatus)

Category 1(kidney)

Category 1(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.

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

Section 14 – TRANSPORT INFORMATION

International Regulations Regulatory Conform to the provisions of IMO.

Information by Sea

UN No. 1247

Proper Shipping METHYL METHACRYLATE, MONOMER, STABILIZED

Class 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	Conform to the provisions of ICAO/IATA.
	Information by Air	
	UN No.	1247
	Proper Shipping	METHYL METHACRYLATE, MONOMER, STABILIZED
	Class	3
	Packing Group	II
Regulations in Japan	Regulatory	Complies with the Fire Service Act.
	Information by Road	
	Regulatory	Conform to the provisions of the Ship Safety Law.
	Information by Sea	
	UN No.	1247
	Proper Shipping	METHYL METHACRYLATE, MONOMER, STABILIZED
	Class	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	Conform to the provisions of the Civil Aeronautics Law.
	Information by Air	
	UN No.	1247
	Proper Shipping	METHYL METHACRYLATE, MONOMER, STABILIZED
	Class	3
	Packing Group	II
Emergency Response		129P
Guide Number		

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

Described in item 1

Other Property

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