**Safety Data Sheet (SDS)**

**Section 1 – CHEMICALS AND COMPANY IDENTIFICATION**

Chemical Identifier: UNIFAST TRAD – Liquid  
Product Code: 210128-2  
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**

<table>
<thead>
<tr>
<th>Physicochemical</th>
<th>Health Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable liquids Category 2</td>
<td>Acute toxicity (Inhalation: vapour) Category 4</td>
</tr>
<tr>
<td>Acute toxicity (Inhalation: dust and mist) Category 4</td>
<td>Skin corrosion/irritation Category 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation Category 2A</td>
<td>Respiratory sensitization Category 1</td>
</tr>
<tr>
<td>Skin sensitization Category 1</td>
<td>Carcinogenicity Category 2</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure) Category 1 (respiratory apparatus)</td>
<td>Specific target organ toxicity (single exposure) Category 2 (blood)</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure) Category 3 (narcotic effect)</td>
<td>Specific target organ toxicity (repeated exposure) Category 1 (respiratory apparatus nervous system)</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure) Category 2 (liver kidney)</td>
<td>Hazardous to the aquatic environment, short-term (acute) Category 3</td>
</tr>
<tr>
<td>Other hazards than mentioned above are Not classified or Classification not possible</td>
<td></td>
</tr>
</tbody>
</table>

**GHS Label Elements**

<table>
<thead>
<tr>
<th>Pictograms</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="flame.png" alt="flame" /> <img src="exclamation.png" alt="exclamation" /> <img src="person.png" alt="person" /></td>
</tr>
</tbody>
</table>

**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
- H322 Harmful if inhaled
- H34 May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H336 May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H338 Causes damage to blood
- H370 Causes damage to respiratory apparatus
- H372 Causes damage to respiratory apparatus, nervous system through prolonged or repeated exposure
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
Dispose of contents and container in accordance with local, regional and national regulations (to be specified). (P501)

Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name or</th>
<th>Concentration or Its</th>
<th>Formula</th>
<th>ENCS No./ISHL No.</th>
<th>CAS RN</th>
</tr>
</thead>
</table>

H373 May cause damage to liver, kidney through prolonged or repeated exposure
H402 Harmful to aquatic life
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 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.
IF exposed or concerned: Call a doctor.

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

Section 5 – FIRE FIGHTING MEASURES

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

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.

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

Section 6 – ACCIDENTAL RELEASE MEASURES

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.

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

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".

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION
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/gas/mist/vapours/spray.

Prevents Handling of Incompatible Substances or Storage

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

<table>
<thead>
<tr>
<th>Methyl methacrylate</th>
<th>Exposure Limits (ACGIH)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA 50 ppm, STEL 100 ppm</td>
</tr>
</tbody>
</table>

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
colorless and transparent

Odour
solvent odor

Melting Point/Freezing Point
Not applicable

Boiling Point or Initial Boiling Point and Boiling Ranges
Not applicable

Flammability
Lower and Upper Explosion Limit / Flammability Limit
Lower Limit
No data available

Upper Limit
Not applicable

Flash Point
No data available

Auto-Ignition
No data available

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
<table>
<thead>
<tr>
<th>Property</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapour Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Density and/or Relative Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Gas Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Particle Characteristics</td>
<td>No data available</td>
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<tr>
<td>Section 10 – STABILITY AND REACTIVITY</td>
<td>No information available</td>
</tr>
<tr>
<td>Reactivity</td>
<td>No information available</td>
</tr>
<tr>
<td>Chemical Stability</td>
<td>No information available</td>
</tr>
<tr>
<td>Possibility of Hazardous Reaction</td>
<td>No information available</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>No information available</td>
</tr>
<tr>
<td>Incompatible Substances or Mixtures</td>
<td>No information available</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>No information available</td>
</tr>
<tr>
<td>Section 11 – TOXICOLOGICAL INFORMATION</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Acute Toxicity Oral</td>
<td>Classification not possible.</td>
</tr>
<tr>
<td>Dermal</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Inhalation (gas)</td>
<td>Does not fall under gas based on GHS definitions.</td>
</tr>
<tr>
<td>(vapour)</td>
<td>Category 4.</td>
</tr>
<tr>
<td>(dust and mist)</td>
<td>Category 4.</td>
</tr>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>Category 2.</td>
</tr>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>Category 2A.</td>
</tr>
<tr>
<td>Respiratory Sensitization</td>
<td>Category 1.</td>
</tr>
<tr>
<td>Skin Sensitization</td>
<td>Category 1.</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Classification not possible.</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 2.</td>
</tr>
<tr>
<td>Reproductive Toxicity (Reproductive toxicity)</td>
<td>Not classified since.</td>
</tr>
<tr>
<td>Classification not possible.</td>
<td></td>
</tr>
<tr>
<td>(Reproductive toxicity, effects on or via lactation)</td>
<td>Unable to classify.</td>
</tr>
<tr>
<td>Specific Target Organ Toxicity (Single Exposure)</td>
<td>Category 1(respiratory apparatus).</td>
</tr>
<tr>
<td>Category 2(blood).</td>
<td></td>
</tr>
<tr>
<td>Category 3(narcotic effect).</td>
<td></td>
</tr>
<tr>
<td>Specific Target Organ Toxicity (Repeated Exposure)</td>
<td>Category 1(respiratory apparatus).</td>
</tr>
</tbody>
</table>
Aspiration Hazard

Classification not possible.

Section 12 - ECOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Hazardous to the Aquatic Environment, Short-Term (Acute)</th>
<th>Category 3.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous to the Aquatic Environment, Long-Term (Chronic)</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Ecotoxicity
Persistence
Bioaccumulative Potential
Mobility in Soil
Hazardous to the Ozone Layer

No data available
No data available
No data available
No data available
Unable to classify.

Section 13 - DISPOSAL CONSIDERATIONS

Residual Waste
Contaminated Container and Packaging

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.
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
UN No. 1247
Proper Shipping Class 3
Packing Group II
Marine Pollutant Liquid Substance Transported in Bulk According to MARPOL 73/78, Annex II, the IBC Code
Applicable

Regulatory Information by Air
UN No. 1247
Proper Shipping Class 3
Packing Group II
Regulatory Information by Road
Complies with the Fire Service Act.

Regulations in Japan
Commonwealth
Conform to the provisions of IMO.

Conform to the provisions of ICAO/IATA.

Conform to the provisions of the Ship Safety Law.

GC Unifast TRAD Liquid, GC Corporation, 2021/03/02, 6/14

Category 1 (nervous system).
Category 2 (liver).
Category 2 (respiratory apparatus).
Category 2 (kidney).
Category 2 (blood).
<table>
<thead>
<tr>
<th>Liquid Substance</th>
<th>Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transported in Bulk</td>
<td>According to MARPOL 73/78, Annex II, the IBC Code</td>
</tr>
<tr>
<td>Regulatory Information by Air</td>
<td>Conform to the provisions of the Civil Aeronautics Law.</td>
</tr>
<tr>
<td>UN No.</td>
<td>1247</td>
</tr>
<tr>
<td>Proper Shipping</td>
<td>METHYL METHACRYLATE, MONOMER, STABILIZED</td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
<tr>
<td>Packing Group</td>
<td>II</td>
</tr>
<tr>
<td>Emergency Response Guide Number</td>
<td>129P</td>
</tr>
</tbody>
</table>

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
No information available
It is recommended to consult the local regulations of the state/region to determine the identification as hazardous material.