

SAFETY DATA SHEETS

This SDS packet was issued with item:

072123032

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

71197631

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

072122604 072122869 072122877 072122885 072122893 072122901 072122919 072122927 072122935 072122943
072122950 072122968 072122976 072122984 072122992 072123008 072123016 072123024 072123040 072123057
072123065 072123073 072125177 072125185 072125706 072126365 072126373 072126381 072126399 072126407
072126415 072126423 072126431 072126449 072126456 072977049



MS877002

GC INITIAL – OPAQUE PASTE
MATERIAL SAFETY DATA SHEET

Page 1 of 2

SECTION 1 - SOURCE/IDENTITY/USE INFORMATION**DISTRIBUTOR**

GC AMERICA INC.

3737 West 127th St.

Alsip, Illinois, 60803

Telephone: 708-597-0900

Hours: Mon.- Fri. 8:00 am. - 5:00 pm. C.S.T.

Transportation Emergency No. 800-424-9300

COMMON NAME: GC INITIAL – OPAQUE PASTE**CHEMICAL NAME:** N.A.**PRODUCT USE:** Dental Porcelain System*The following information is provided with regard to the toxicity and hazards the pure components present in this product.***SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

COMPONENT	C.A.S.	EXPOSURE LIMITS	LD50/LC50	%
Crystalline Silica	14464-46-1	TWA=0.05mg/m ³ (Respirable Dust) (ACGIH)	N.E.	30-40%
Aluminum oxide	1344-28-1	PEL= 5mg/m ³ TLV=10mg/m ³	N.E.	7-13%
Glycerol	56-81-5	TWA=10 mg/m ³ (as mist) (ACGIH)	N.E.	30-50%
Propylene Glycol	57-55-6	TWA=10mg/m ³ Dow (mist)	LD50=20.0-33.7g/kg (oral rat) LC50=N.E.	30-40%

SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES**BOILING POINT:** 290°C**VAPOR PRESSURE @20°C:** 0.1 hPa**VAPOR DENSITY:** N.E.**SOLUBILITY IN WATER:** not soluble**COEFFICIENT OF OIL/WATER DISTRIBUTION:** N.E.**SPECIFIC GRAVITY:** N.E.**MELTING POINT:** N.E.**EVAPORATION RATE:** N.E.**ODOR THRESHOLD:** N.E.**APPEARANCE AND ODOR:** paste**SECTION 4 - FIRE AND EXPLOSION DATA****FLASH POINT:** 160°C**FLAMMABLE LIMITS:** Lower – 0.9 Vol%**EXTINGUISHING MEDIA:** Water fog, carbon dioxide, dry chemical, alcohol-resistant foam.**SPECIAL FIRE FIGHTING PROCEDURES:** N.A.**UNUSUAL FIRE AND EXPLOSION HAZARDS:** N.A.**HAZARDOUS COMBUSTION PRODUCTS:** N.A.**SECTION 5 - REACTIVITY DATA****STABILITY:** Stable ☒Unstable ☐**POLYMERIZATION:** Will Not Occur ☒Will Occur ☐**CONDITIONS TO AVOID:** High heat, high humidity**INCOMPATIBILITY (Materials to Avoid):** N.A.**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** N.A.

SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION

	YES	NO	NE	NA	NTP	IARC	OSHA	OTHER
MUTAGENIC AFFECTS		X						
TERATOGENIC AFFECTS		X						
REPRODUCTIVE TOXIN		X						
CARCINOGENICITY	X				X	Group 2A		Calif. Prop 65
SENSITIZER		X						

ROUTES OF ENTRY: Inhalation ☒ Skin ☒ Ingestion ☒

HEALTH HAZARD (Acute and Chronic): Contains crystalline silica, which is considered a hazard by inhalation. IARC has classified it as a probable carcinogenic for humans. Crystalline silica is also a known cause of silicosis, a non-cancerous lung disease.

CALIFORNIA PROP 65 WARNING: This product contains crystalline silica, a chemical known to the State of California to cause cancer.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: Irritation and soreness in eyes, throat and nose.

CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Individuals with pre-existing conditions of the lungs may have increased susceptibility to the toxicity of excessive exposures.

EMERGENCY FIRST AID PROCEDURES:

INHALATION: Supply fresh air. Consult physician if irritation develops.

EYE CONTACT: Rinse eye with water for several minutes. If irritation persists, consult physician.

SKIN CONTACT: Wash with soap and water. Consult physician if irritation develops.

INGESTION: Consult physician if irritation develops.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

IN CASE OF RELEASE OR SPILL: Absorb with inert material, scrape up and discard.

WASTE DISPOSAL METHOD: Dispose of material in accordance with local, state and federal regulations.

STORAGE, HANDLING, AND SPECIAL PRECAUTIONS: Store in cool, dry place.

SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION: In case of exposure to dust over regulatory limits, wear a personal respirator of an approved type.

VENTILATION: Local Exhaust - YES Mechanical: ☐ Special: ☐ Other: ☐

PROTECTIVE GLOVES: Disposable vinyl gloves recommended.

EYE PROTECTION: Safety glasses recommended.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: N.A.

WORK/HYGIENIC PRACTICE: Observe good hygienic practices.

SECTION 9 - PREPARATION INFORMATION

This data is supplied to comply with OSHA Hazard Communication Standard 29 CFR 1910,1200 and W.H.M.I.S. CPR.

DATE: 09 January 2006

REVIEWED: 27 February 2012

N.A. = NOT APPLICABLE

N.E. = NOT ESTABLISHED

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

FIRE – 1

TOXICITY – 2

NFPA

REACTIVITY – 1

SPECIAL –



Safety Data Sheet

acc. to OSHA HCS 29 CFR 1910.1200

Printing date 03/21/2015

Version US-EN-Rev 1

Reviewed on 03/21/2015

1 Identification

- **Product identifier**

- **Trade name:** GC Initial™ MC Paste Opaque, MC Paste Opaque Modifier, and MC CL Paste Opaque Classic - Pastes

- **Relevant identified uses of the substance or mixture and uses advised against**

Dental material

The product is intended for professional use.

To avoid risks for humans and environment obtain instructions.

- **Application of the substance / the mixture** Auxiliary for manufacture of dental prothesis

- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

GC America Inc.

3737 W. 127th Street

Alsip, IL 60803

USA

sds@gcamerica.com

- **Information department:** Regulatory Affairs

- **Emergency telephone number:**

During normal opening times (Mon.-Fri. 8:00 AM-5:00 PM CST): +1 (708) 597-0900

Transportation (CHEMTREC®) Emergency Telephone No. +1 (800) 424-9300

2 Hazard(s) identification

- **Classification of the substance or mixture**

The product is not classified according to the Globally Harmonized System (GHS).

- **Additional information:**

The information provided is in regards to the toxicity and hazard rating(s) of the individual component(s) in the formulation. The associated risk(s) depends on the route(s) of exposure. The hazard rating system is based entirely on the existence of the risk(s) and does not take into account the likelihood of reduced risk(s) through proper usage and handling.

- **Label elements**

- **GHS label elements** Void

- **Hazard pictograms** Void

- **Signal word** Void

- **Hazard statements** Void

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 0

Fire = 1

Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



HEALTH 0 Health = 0

FIRE 1 Fire = 1

REACTIVITY 0 Reactivity = 0

(Contd. on page 2)

US

Safety Data Sheet

acc. to OSHA HCS 29 CFR 1910.1200

Printing date 03/21/2015

Version US-EN-Rev 1

Reviewed on 03/21/2015

Trade name: GC Initial™ MC Paste Opaque, MC Paste Opaque Modifier, and MC CL Paste Opaque Classic - Pastes

(Contd. of page 1)

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

57-55-6 propylene glycol	25-50%
--------------------------	--------

- **Additional information:**

If a substance is marked with **, then substance is a trade secret. This is allowed under OSHA's Hazard Communication Standard (HCS) as a trade secret and under GHS as Confidential Business Information (CBI).

4 First-aid measures

- **Description of first aid measures**
- **General information:**
No special measures required.
If symptoms persist consult doctor.
- **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Rinse with warm water.
If symptoms persist consult doctor.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.

(Contd. on page 3)

US

Safety Data Sheet

acc. to OSHA HCS 29 CFR 1910.1200

Printing date 03/21/2015

Version US-EN-Rev 1

Reviewed on 03/21/2015

Trade name: GC Initial™ MC Paste Opaque, MC Paste Opaque Modifier, and MC CL Paste Opaque Classic - Pastes

(Contd. of page 2)

- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Remove persons from danger area.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to penetrate the ground/soil.
In case of seepage into the ground inform responsible authorities.
- **Methods and material for containment and cleaning up:**
Absorb liquid components with liquid-binding material.
Dispose of the collected material according to regulations.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Observe instructions for use.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store only in unopened original receptacles.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Observe instructions for use / storage.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
 - **Control parameters**
 - **Components with limit values that require monitoring at the workplace:**
- | |
|----------------------------------|
| 57-55-6 propylene glycol |
| WEEL Long-term value: 10 mg/m³ |
- **Additional information:** The lists that were valid during the creation were used as basis.
 - **Exposure controls**
 - **Personal protective equipment:**
 - **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.

(Contd. on page 4)

US

Safety Data Sheet

acc. to OSHA HCS 29 CFR 1910.1200

Printing date 03/21/2015

Version US-EN-Rev 1

Reviewed on 03/21/2015

Trade name: GC Initial™ MC Paste Opaque, MC Paste Opaque Modifier, and MC CL Paste Opaque Classic - Pastes

(Contd. of page 3)

Wash hands before breaks and at the end of work.

· **Breathing equipment:** Suitable respiratory protective device recommended.

· **Protection of hands:** Protective gloves

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Safety glasses

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:

Fluid

Color:

According to product specification

· **Odor:**

Characteristic

· **Odor threshold:**

Not determined.

· **pH-value:**

Not determined.

· **Change in condition**

Melting point/Melting range:

Undetermined.

Boiling point/Boiling range:

290 °C (554 °F)

· **Flash point:**

160 °C (320 °F)

· **Flammability (solid, gaseous):**

Not applicable.

· **Ignition temperature:**

Undetermined.

· **Decomposition temperature:**

Not determined.

· **Auto igniting:**

Product is not selfigniting.

· **Danger of explosion:**

Product does not present an explosion hazard.

· **Explosion limits:**

Lower:

2.6 Vol %

Upper:

12.6 Vol %

· **Vapor pressure:**

Not determined.

· **Density:**

Not determined.

· **Relative density**

Not determined.

· **Vapour density**

Not determined.

· **Evaporation rate**

Not determined.

· **Solubility in / Miscibility with**

Water:

Insoluble.

(Contd. on page 5)

US

Safety Data Sheet

acc. to OSHA HCS 29 CFR 1910.1200

Printing date 03/21/2015

Version US-EN-Rev 1

Reviewed on 03/21/2015

Trade name: GC Initial™ MC Paste Opaque, MC Paste Opaque Modifier, and MC CL Paste Opaque Classic - Pastes

(Contd. of page 4)

- | | |
|---|--|
| · Partition coefficient (n-octanol/water): Not determined. | |
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · Solvent content: | |
| Organic solvents: | 31.0 % |
| VOC content: | 31.0 % |
| Solids content: | 80.0 % |
| · Other information | No further relevant information available. |

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Stable at ambient temperature.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** No further relevant information available.
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product is not subject to classification according to internally approved calculation methods for preparations:
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.
- **NTP (National Toxicology Program)**
None of the ingredients is listed.
- **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.
- **Carcinogenic categories' legend:**
IARC Group 1: The agent is carcinogenic to humans.
IARC Group 2A: The agent is probably carcinogenic to humans.
IARC Group 2B: The agent is possibly carcinogenic to humans.
IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans.

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS 29 CFR 1910.1200

Printing date 03/21/2015

Version US-EN-Rev 1

Reviewed on 03/21/2015

Trade name: GC Initial™ MC Paste Opaque, MC Paste Opaque Modifier, and MC CL Paste Opaque Classic - Pastes

(Contd. of page 5)

IARC Group 4: The agent is probably not carcinogenic to humans.
 NTP K: Known to be human carcinogen.
 NTP R: Reasonably anticipated to be human carcinogen.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
 Water hazard class 3 (Self-assessment): extremely hazardous for water
 Do not allow product to reach ground water, water course or sewage system, even in small quantities.
 Danger to drinking water if even extremely small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Smaller quantities can be disposed of with household waste.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---------------------------------------|-----------------|
| · UN-Number | |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · UN proper shipping name | |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) | |
| · DOT, ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · Packing group | |
| · DOT, ADR, IMDG, IATA | Void |
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |

(Contd. on page 7)

US

Safety Data Sheet

acc. to OSHA HCS 29 CFR 1910.1200

Printing date 03/21/2015

Version US-EN-Rev 1

Reviewed on 03/21/2015

Trade name: GC Initial™ MC Paste Opaque, MC Paste Opaque Modifier, and MC CL Paste Opaque Classic - Pastes

(Contd. of page 6)

- | | |
|--|-----------------|
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | - |

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- SARA (Superfund Amendments and Reauthorization Act)

· Section 355 (extremely hazardous substances):
--

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):
--

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

glass, oxide, chemicals

propylene glycol

- Carcinogenic categories

· EPA (Environmental Protection Agency)
--

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- GHS label elements Void

- Hazard pictograms Void

- Signal word Void

- Hazard statements Void

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

- Department issuing SDS: Regulatory Affairs

- Contact:

Regulatory Affairs

Telephone No. +1 (708) 597-0900

sds@gcamerica.com

- Date of preparation / last revision 03/21/2015 / -

- Abbreviations and acronyms:

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

HCS: Hazard Communication Standard (USA)

MSDS: Material Safety Data Sheet

SDS: Safety Data Sheet

ADN: Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways)

ECHA: European Chemicals Agency

OSHA: Occupational Safety and Health Administration (USA)

(Contd. on page 8)

US

Safety Data Sheet

acc. to OSHA HCS 29 CFR 1910.1200

Printing date 03/21/2015

Version US-EN-Rev 1

Reviewed on 03/21/2015

Trade name: GC Initial™ MC Paste Opaque, MC Paste Opaque Modifier, and MC CL Paste Opaque Classic - Pastes

(Contd. of page 7)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

• Sources

- Manufacturers' MSDSs/SDSs
- OSHA (<https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html>)
- TOXNET (<http://toxnet.nlm.nih.gov/>)
- ECHA (<http://echa.europa.eu/>)
- EnviChem (www.echemportal.org)

• Notes:

CAS Registry Number is a Registered Trademark of the American Chemical Society.

CHEMTREC® is a registered service mark of the American Chemistry Council, Inc.

- * **Data compared to the previous version altered.** This version replaces all previous versions.

• Disclaimer:

The information contained herein is believed to be true and accurate. However, all statements, recommendations or suggestions are made without any guarantee, representation or warranty, express or implied, on our part. Therefore, no warranty is made or to be implied that the information set out in this document is accurate or complete, and we accordingly exclude all liability in connection with the use of this information or the products referred to herein. All such risks are assumed by the purchaser/user. The information contained herein is also subject to change without notice. For the avoidance of doubt, however, nothing in this document excludes or limits our liability for death or personal injury caused by our negligence or for fraudulent misrepresentation.

— US —