SAFETY DATA SHEETS

This SDS packet was issued with item: 072123909

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).

072123917 072986404 072987147 072987154 072987162



GC INITIAL – LIQUID 1 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 – GLAZE LIQUID, UNIVERSAL LIQUIDCHEMICAL 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	%
Propylene Glycol	57-55-6	TWA=10mg/m ³	LD50-20.0-33.7g/kg	90-100%
		Dow (mist)	(oral rat)	
			LC50=N.E.	

SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES

BOILING POINT: N.E.	SPECIFIC GRAVITY:	N.E.
VAPOR PRESSURE @20°C: 0.11 hPa	MELTING POINT:	-68°C
VAPOR DENSITY @ 20°C: 1.0362 g/cm ³	EVAPORATION RATE:	N.E.
SOLUBILITY IN WATER: not soluble	ODOR THRESHOLD:	N.E.
COEFFICIENT OF OIL/WATER DISTRIBUTION: $N.E.$	APPEARANCE AND ODOR:	oily, colorless, near odorless

SECTION 4 - FIRE AND EXPLOSION DATA

 FLASH POINT: N.A.
 FLAMMABLE LIMITS: Upper – 12.6 Vol%; Lower – 2.6 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:
POLYMERIZATION

Stable 🔀 Will Not Occur 🔀

Unstable	
Will Occur	

CONDITIONS TO AVOID: High heat, high humidity

INCOMPATIBILITY (Materials to Avoid): Strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon dioxide and carbon monoxide may form when heated to decomposition. Aldehydes or lactic, pyruvic or acetic acids may also be formed.

SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION

	YES	NO	NE	NA	NTP	IARC	OSHA	OTHER
MUTAGENIC AFFECTS		X						
TERATOGENIC AFFECTS		Х						
REPRODUCTIVE TOXIN		Х						
CARCINOGENICITY		Х						
SENSITIZER		X						

ROUTES OF ENTRY: Inhala

Ingestion 🔀

Skin 🖂



MS877003

GC INITIAL – LIQUID 1

SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION - continued

HEALTH HAZARD (Acute and Chronic): May cause irritation to skin and eyes. In case of ingestion, monitor for acidosis and central nervous system changes. Exposed persons with previous kidney dysfunction may require special treatment. Ingestion of sizeable amount (over 100ml) may cause some gastrointestinal upset and temporary central nervous system depression. Effects appear more severe in individuals with kidney problems.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: N.A.

CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Kidney disorders.

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: Give several glasses of water to drink to dilute. If large amounts were swallowed or irritation develops, consult physician.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

IN CASE OF RELEASE OR SPILL: Absorb with inert material, scrap 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 personal respirator of an approved type.

VENTILATION: Local Exhaust

Special:

Other:

PROTECTIVE GLOVES: Disposable vinyl gloves recommended. **EYE PROTECTION:** Safety glass 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.

Mechanical:

 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.

		• • • • • • • • • • • • • • • • • • • •		•••••
		NFPA		
FIRE – 1	TOXICITY -0	REACTIVITY – 0	SPECIAL -	



,'GC.'

Safety Data Sheet acc. to OSHA HCS 29 CFR 1910.1200

Printing date 02/27/2015

Version US-EN-Rev 1

Reviewed on 02/27/2015

1 Identification

· Product identifier

• Trade name: GC Initial[™] AL Glaze Liquid / GC Initial[™] LF Glaze Liquid / GC Initial[™] MC Glaze Liquid / GC Initial[™] Ti Glaze Liquid / GC Initial[™] Zr-FS Glaze Liquid

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)

0 0 Health = 0 Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)

HEALTHImage: OHealth = 0FIREImage: OFire = 0REACTIVITYReactivity = 0

(Contd. on page 2)

US

Printing date 02/27/2015

Version US-EN-Rev 1

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Trade name: GC Initial[™] AL Glaze Liquid / GC Initial[™] LF Glaze Liquid / GC Initial[™] MC Glaze Liquid / GC Initial[™] Ti Glaze Liquid / GC Initial[™] Zr-FS Glaze Liquid

(Contd. of page 1)

90-100%

· 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

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)

Printing date 02/27/2015

Version US-EN-Rev 1

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(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. Do not allow to penetrate the ground/soil.
- **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. Wash hands before breaks and at the end of work.

• Breathing equipment: Suitable respiratory protective device recommended.

(Contd. on page 4)

US

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(Contd. of page 3)

· 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

Information on basic physical and General Information	chemical properties
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:	Undetermined.
Flash point:	Not applicable.
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:	Fully miscible.

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		(Contd. of page
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	99.9 %	
Water:	0.1 %	
VOC content:	99.9 %	
· 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.
- IARC Group 4: The agent is probably not carcinogenic to humans.

NTP K: Known to be human carcinogen.

(Contd. on page 6)

Printing date 02/27/2015

Version US-EN-Rev 1

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(Contd. of page 5)

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 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · 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.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

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)

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(Contd. of page 6)

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 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):

All ingredients are listed.

· 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 02/27/2015 / -· 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) ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) (Contd. on page 8)

Printing date 02/27/2015

Version US-EN-Rev 1

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(Contd. of page 7) 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) HMIS: 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

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