

MATERIAL SAFETY DATA SHEET

SECTION 1 - SOURCE/IDENTITY/USE INFORMATION:

MANUFACTURER:

GC AMERICA INC.

3737 West 127th St.

Alsip, Illinois, 60658

Telephone: 708-597-0900

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

Transportation Emergency Telephone No. 800-424-9300

COMMON NAME: GC RELINE - LIQUID

Chemical Name: N.A.

PRODUCT USE: Hard denture lining material - Liquid

The following information is provided with regard to the toxicity and hazards of the pure components present in this portion of the unmixed powder/liquid system.

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION:

COMPONENT AND C.A.S.	EXPOSURE LIMITS	LD50/LC50	%
Butoxyethyl Methacrylate N.E.	N.E.	N.E.	30%
Benzyl Methacrylate 2495-37-6	N.E.	N.E.	25%
Monomer 1985-51-9	N.E.	N.E.	23%
1,6 Hexanediol Dimethacrylate 6606-59-3	N.E.	N.E.	23%
P-Tolyldiethanolamine 3077-12-1	N.E.	N.E.	2%
Ethyl P-Dimethylaminobenzoate 10287-53-3	N.E.	N.E.	1%

SECTION 4 - FIRE AND EXPLOSION DATA:

FLASH POINT: N.A. FLAMMABLE LIMITS: N.E.

EXTINGUISHING MEDIA: Water, fog, foam, carbon dioxide, dry chemical

SPECIAL FIRE FIGHTING PROCEDURES: Self contained breathing apparatus with full face piece and protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known

HAZARDOUS COMBUSTION PRODUCTS: N.E.

SECTION 5 - REACTIVITY DATA:

STABILITY: STABLE: X UNSTABLE:
POLYMERIZATION: WILL NOT OCCUR: X WILL OCCUR:

CONDITIONS TO AVOID: High heat

INCOMPATIBILITY (MATERIALS TO AVOID): None known

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon dioxide, carbon monoxide
methyl methacrylate

SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION:

	YES	NO	N.E.	N.A.	NTP	IARC	OSHA	OTHER
MUTAGENIC AFFECTS:		X						
TERATOGENIC AFFECTS:		X						
REPRODUCTIVE TOXIN:		X						
CARCINOGENICITY:		X						
SENSITIZER:		X						

ROUTES OF ENTRY: INHALATION X SKIN X INGESTION

HEALTH HAZARD: (ACUTE AND CHRONIC): Can cause moderate irritation to eyes and skin. May cause skin sensitization.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: High concentrations irritant to respiratory tract and may lead to dizziness, headache and anesthetic effects.

CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N.A.

SECTION 6 - CONTINUED - HEALTH HAZARD DATA and FIRST AID INFORMATION:**EMERGENCY FIRST AID PROCEDURES:**

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

INGESTION: If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Call a physician.

SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes. If irritation persists call a physician.

EYES: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists call a physician.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE:

IN CASE OF RELEASE OR SPILL: Sweep up and recover mix material with moist absorbent and shovel into waste container. Wash spill area with hot water and detergent.

WASTE DISPOSAL METHOD: In accordance with Federal, State and local regulations.

STORAGE, HANDLING, AND SPECIAL PRECAUTIONS: Store in cool, dry place. Keep away from heat or open flame.

SECTION 8 - CONTROL MEASURES:**RESPIRATORY PROTECTION:**

VENTILATION:	LOCAL EXHAUST: YES	MECHANICAL: N.E.
	SPECIAL: N.E.	OTHER: N.E.

PROTECTIVE GLOVES: If necessary, use protective gloves to reduce irritation.

EYE PROTECTION: Safety glasses

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Eye wash station

WORK/HYGIENIC PRACTICE: Observe good hygienic practices.

SECTION 9 - PREPARATION INFORMATION:

This data is supplied to comply with OSHA Hazard Communication Standard 2 CFR 1910,1200 and W.H.M.I.S. CPR

PREPARED BY: T. Joritz
Director Regulatory Affairs

Date: 1 November 97

N.A. = NOT APPLICABLE
N.E. = NOT ESTABLISHED

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

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FIRE 1 TOXICITY 1 REACTIVITY 1 SPECIAL --

SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES:

BOILING POINT: N.E. SPECIFIC GRAVITY (H2O = 1): N.E.
VAPOR PRESSURE: N.E. MELTING POINT: N.E.
VAPOR DENSITY: N.E. EVAPORATION RATE: N.E.
SOLUBILITY IN WATER: N.E. ODOR THRESHOLD: N.E.
COEFFICIENT OF OIL/WATER DISTRIBUTION: N.E.

APPEARANCE AND ODOR: Clear, colorless to light yellowish liquid with methacrylic odor.

SECTION 4 - FIRE AND EXPLOSION DATA:

FLASH POINT: 101°C FLAMMABLE LIMITS: N.E.

EXTINGUISHING MEDIA: Dry chemical, foam, CO2, or water

SPECIAL FIRE FIGHTING PROCEDURES: A self contained breathing apparatus

UNUSUAL FIRE AND EXPLOSION HAZARDS: N.E.

HAZARDOUS COMBUSTION PRODUCTS: N.E.

SECTION 5 - REACTIVITY DATA:

STABILITY: STABLE: X UNSTABLE:
POLYMERIZATION: WILL NOT OCCUR: MAY OCCUR: X

CONDITIONS TO AVOID: High heat, oxidizing agents

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizing agents

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon monoxide, carbon dioxide

SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION:

	YES	NO	N.E.	N.A.	NTP	IARC	OSHA	OTHER
MUTAGENIC AFFECTS:		X						
TERATOGENIC AFFECTS:		X						
REPRODUCTIVE TOXIN:		X						
CARCINOGENICITY:		X						
SENSITIZER:		X						

ROUTES OF ENTRY: INHALATION X SKIN X INGESTION X

HEALTH HAZARD: (ACUTE AND CHRONIC): No data available

SIGNS AND SYMPTOMS OF OVEREXPOSURE: N.E.

SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION: - continued**CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N.E.****EMERGENCY FIRST AID PROCEDURES:**

INHALATION: Remove exposed person to fresh air. Administer artificial respiration if required and seek medical attention.

INGESTION: Induce vomiting and call a physician.

SKIN: Remove contaminated clothing. Wash skin with soap and water for 5 minutes.

EYES: Immediately flush with plenty of water for at least 15 minutes.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE:

IN CASE OF RELEASE OR SPILL: Absorb with inert material such as sand and transfer to suitable container for disposal.

WASTE DISPOSAL METHOD: Incinerate in a furnace or bury in an approved landfill according Federal, State and local regulations.

STORAGE, HANDLING, AND SPECIAL PRECAUTIONS: Store in tightly closed containers in a cool dry area away from heat, sparks, or open flames.

SECTION 8 - CONTROL MEASURES:

RESPIRATORY PROTECTION: At high vapor concentrations an approved organic vapor cartridge respirator should be worn.

VENTILATION: LOCAL EXHAUST: Yes MECHANICAL: N.E.
 SPECIAL: N.E. OTHER: N.E.

PROTECTIVE GLOVES: Impervious

EYE PROTECTION: Safety goggles

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Eyewash station

WORK/HYGIENIC PRACTICE: Observe good hygienic practices.

SECTION 9 - PREPARATION INFORMATION:

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PREPARED BY: T. Joritz
Director Regulatory Affairs

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COMMON NAME: GC RELINE - POWDER

Chemical Name: N.A.

PRODUCT USE: Hard denture lining material - Powder

The following information is provided with regard to the toxicity and hazards of the pure components present in this portion of the unmixed powder/liquid system.

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION:

COMPONENT AND C.A.S.	EXPOSURE LIMITS	LD50/LC50	%
Polyethyl Methacrylate N.E.	TLV-TWA (8 hours) 10mg/m ³ (ACGIH)	N.E.	90-100%
Benzoyl Peroxide 94-36-0	TWA: 5mg/m ³ (OSHA/ACGIH)	LD50: 70 10mg/kg (oral rat)	<1%
Silicone Dioxide 112926-00-8	PEL 6mg/m ³ TLV 10mg/m ³	LD50: >10000mg/kg (oral rat)	1%

SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES:

BOILING POINT: N.E.	SPECIFIC GRAVITY (H ₂ O = 1): N.E.
VAPOR PRESSURE: N.E.	MELTING POINT: N.E.
VAPOR DENSITY: N.E.	EVAPORATION RATE: N.E.
SOLUBILITY IN WATER: N.E.	ODOR THRESHOLD: N.E.
COEFFICIENT OF OIL/WATER DISTRIBUTION: N.E.	

APPEARANCE AND ODOR: White powder

SECTION 4 - FIRE AND EXPLOSION DATA:

FLASH POINT: N.A.

FLAMMABLE LIMITS: N.E.

EXTINGUISHING MEDIA: Water, fog, foam, carbon dioxide, dry chemical

SPECIAL FIRE FIGHTING PROCEDURES: Self contained breathing apparatus with full face piece and protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known

HAZARDOUS COMBUSTION PRODUCTS: N.E.

SECTION 5 - REACTIVITY DATA:

STABILITY:

STABLE: X

UNSTABLE:

POLYMERIZATION:

WILL NOT OCCUR: X

WILL OCCUR:

CONDITIONS TO AVOID: High heat

INCOMPATIBILITY (MATERIALS TO AVOID): None known

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon dioxide, carbon monoxide, methyl methacrylate

SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION:

	YES	NO	N.E.	N.A.	NTP	IARC	OSHA	OTHER
MUTAGENIC AFFECTS:		X						
TERATOGENIC AFFECTS:		X						
REPRODUCTIVE TOXIN:		X						
CARCINOGENICITY:		X						
SENSITIZER:		X						

ROUTES OF ENTRY: INHALATION X SKIN X INGESTION

HEALTH HAZARD: (ACUTE AND CHRONIC): Can cause moderate irritation to eyes and skin. May cause skin sensitization.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: High concentrations irritant to respiratory tract and may lead to dizziness, headache and anesthetic effects.

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Silicone Dioxide 112926-00-8	PEL 6mg/m ³ TLV 10mg/m ³	LD50:>10000mg/kg (oral rat)	1%

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VAPOR PRESSURE: N.E.	MELTING POINT: N.E.
VAPOR DENSITY: N.E.	EVAPORATION RATE: N.E.
SOLUBILITY IN WATER: N.E.	ODOR THRESHOLD: N.E.
COEFFICIENT OF OIL/WATER DISTRIBUTION: N.E.	

APPEARANCE AND ODOR: White powder