

MATERIAL SAFETY DATA SHEET

SECTION 1 - SOURCE/IDENTITY/USE INFORMATION

MANUFACTURER SUPPLIER

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 Telephone No. 800-424-9300

COMMON NAME: FUJI IX GP LIQUID
FUJI IX GP CAPSULES LIQUID
FUJI IX GP FAST SET

Chemical Name: N.A.

PRODUCT USE: Glass ionomer for Restorative Treatment liquid component

The following information is provided with regard to the toxicity and hazards of the pure components present in this product.

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Table with 4 columns: COMPONENT AND C.A.S., EXPOSURE LIMITS, LD50/LC50, and %. Row 1: Polyacrylic acid (not listed), TWA=10ppm (ACGIH), D50 = 2500mg/kg (oral rat), LC50=N.E., 30-40%

SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES

BOILING POINT: 101°C SPECIFIC GRAVITY (H2O = 1): 1.18
VAPOR PRESSURE: N.E. MELTING POINT: 13°C
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: Colorless, slightly viscous and odorless liquid

SECTION 4 - FIRE AND EXPLOSION DATA

FLASH POINT: Not flammable FLAMMABLE LIMITS: N.A.

EXTINGUISHING MEDIA: Alcohol foam

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

EMERGENCY FIRST AID PROCEDURES:

INGESTION: Do not induce vomiting. Give large volumes of water. Seek medical attention.

SKIN: Wash with soap and water. If irritation develops, seek medical attention.

EYES: Flush with water for 15 minutes. If irritation develops, seek medical attention.

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SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

IN CASE OF RELEASE OR SPILL: Soak up spill with absorbent material. Flush area with water.

WASTE DISPOSAL METHOD: Dilute with water. Flush into drain with large volumes of water.

STORAGE, HANDLING, AND SPECIAL PRECAUTIONS: Store in a cool dry place in tightly closed container.

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SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION: None required

VENTILATION: None required

LOCAL EXHAUST: N.A. MECHANICAL: N.E.
SPECIAL: N.E. OTHER: N.E.

PROTECTIVE GLOVES: Latex gloves are recommended

EYE PROTECTION: Goggles or full-face shield

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Do not spill on clothing. Eyewash station

WORK/HYGIENIC PRACTICE: N.E.

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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

PREPARED BY: T. Joritz
Director Regulatory Affairs

Date: 1 November 97

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

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

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FIRE 0	TOXICITY 1	REACTIVITY 1	SPECIAL ACID, CORR

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COMMON NAME: FUJI COAT LC

Chemical Name: N.A.

PRODUCT USE: Light-cured coating agent for glass ionomer restorations.

The following information is provided with regard to the toxicity and hazards of the pure components present in this product.

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

COMPONENT AND C.A.S.	EXPOSURE LIMITS	LD50/LC50	%
Multifunctional Urethane Methacrylate	N.E.	N.E.	30%
Aliphatic dimethacrylate	N.E.	N.E.	38%
Methyl Methacrylate 80-62-6	TWA=100ppm (ACGIH)	LD50=5.2g/kg (oral rat) LC50=3750ppm/4 hr	30%
Tertiary Amine	N.E.	N.E.	2%

SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES

BOILING POINT: N.E. SPECIFIC GRAVITY (H₂O = 1): 0.96
 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: Slight yellow color and slight odor

SECTION 4 - FIRE AND EXPLOSION DATA

FLASH POINT: 10°C(CC) FLAMMABLE LIMITS: N.E.

EXTINGUISHING MEDIA: Carbon dioxide, dry chemicals, water

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus with full protective equipment.

UNUSUAL FIRE AND EXPLOSION HAZARDS: N.E.

HAZARDOUS COMBUSTION PRODUCTS: N.E.

SECTION 5 - REACTIVITY DATA

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

CONDITIONS TO AVOID: Avoid heat and ignition sources.

INCOMPATIBILITY (MATERIALS TO AVOID): N.E.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: N.E.

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): Eye irritation. Inhalation may cause headache.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: N.E.

CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N.E.

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

INHALATION: Remove to fresh air.

If breathing is difficult give oxygen and seek medical attention.

INGESTION: Do not induce vomiting.

Give one or two glasses of water and seek medical attention.

SKIN: Wash with soap and water.

EYES: Flush with water, if irritation persist consult physician.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE**IN CASE OF RELEASE OR SPILL:**

Contain spill using absorbent materials to soak up liquid.

WASTE DISPOSAL METHOD:

In accordance with local, state and federal regulations.

STORAGE, HANDLING, AND SPECIAL PRECAUTIONS:

Store at room temperature. Remain out of direct sunlight and heat.

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

VENTILATION: LOCAL EXHAUST: N.E.
SPECIAL: N.E.

MECHANICAL: N.E.
OTHER: N.E.

PROTECTIVE GLOVES: Rubber gloves

EYE PROTECTION: Safety goggles

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: N.E.

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

PREPARED BY: T. Joritz
Director Regulatory Affairs

Date: 1 November 97

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FIRE 4 TOXICITY 1 REACTIVITY 0 SPECIAL -

SECTION 4 - FIRE AND EXPLOSION DATA - continued

SPECIAL FIRE FIGHTING PROCEDURES: Full protective clothing and self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

HAZARDOUS COMBUSTION PRODUCTS: Emits Acrid smoke when heated beyond boiling point.

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SECTION 5 - REACTIVITY DATA

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

CONDITIONS TO AVOID: High heat

INCOMPATIBILITY (MATERIALS TO AVOID): Alkali will inactivate product

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: N.E.

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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 SKIN X INGESTION X

HEALTH HAZARD: (ACUTE AND CHRONIC): Acidic solution (pH=1.90), care should be taken to avoid contact with skin or eyes.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: N.E.

CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N.E.

EMERGENCY FIRST AID PROCEDURES:

INGESTION: Do not induce vomiting - give large volumes of water. Seek medical attention.

SKIN: Wash with soap and water. If irritation develops seek medical attention.

EYES: Flush with water for 15 minutes. If irritation develops seek medical attention.

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SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

IN CASE OF RELEASE OR SPILL: Neutralize with diluted hydroxide.

WASTE DISPOSAL METHOD: Dilute with water and flush into drain with large volumes of water.

STORAGE, HANDLING, AND SPECIAL PRECAUTIONS: Store in a cool dry place in tightly closed container.

SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION: None required

VENTILATION: None required LOCAL EXHAUST: N.A. MECHANICAL: N.A. SPECIAL: N.E. OTHER: N.A.

PROTECTIVE GLOVES: Latex gloves are recommended

EYE PROTECTION: Goggles or full face shield

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Do not spill on clothing. Eyewash station

WORK/HYGIENIC PRACTICE: N.E.

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

PREPARED BY: T. Joritz Date: 03 January 2000 Director Regulatory Affairs

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FIRE 1 TOXICITY 2 REACTIVITY 0 SPECIAL ACID

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COMMON NAME: FUJI IX GP POWDER
FUJI IX GP CAPSULE POWDER
FUJI IX GP FAST SET

Chemical Name: N.A.

PRODUCT USE: Glass ionomer for Restorative Treatment - powder component

The following information is provided with regard to the toxicity and hazards of the pure components present in this product.

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Table with 4 columns: COMPONENT AND C.A.S., EXPOSURE LIMITS, LD50/LC50, and %. Rows include Polyacrylic acid (not listed) and Aluminosilicate glass (not listed).

SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES

BOILING POINT: N.E. SPECIFIC GRAVITY (H2O = 1): 2.56
VAPOR PRESSURE: N.A. MELTING POINT: 1350°C
VAPOR DENSITY: N.A. EVAPORATION RATE: N.A.
SOLUBILITY IN WATER: Insoluble ODOR THRESHOLD: N.E.
COEFFICIENT OF OIL/WATER DISTRIBUTION: N.E.

APPEARANCE AND ODOR: Very fine white powder

SECTION 4 - FIRE AND EXPLOSION DATA

FLASH POINT: Not flammable FLAMMABLE LIMITS: N.A.
EXTINGUISHING MEDIA: Alcohol foam

SECTION 4 - FIRE AND EXPLOSION DATA - CONTINUED

SPECIAL FIRE FIGHTING PROCEDURES: Full protective clothing and self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

HAZARDOUS COMBUSTION PRODUCTS: Emits Acrid smoke when heated above 101°C.

SECTION 5 - REACTIVITY DATA

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

CONDITIONS TO AVOID: High heat

INCOMPATIBILITY (MATERIALS TO AVOID): Alkali will inactivate product

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: N.E.

SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION

Table with 8 columns: YES, NO, N.E., N.A., NTP, IARC, OSHA, OTHER. Rows include MUTAGENIC AFFECTS, TERATOGENIC AFFECTS, REPRODUCTIVE TOXIN, CARCINOGENICITY, SENSITIZER.

ROUTES OF ENTRY: INHALATION X SKIN X INGESTION X

HEALTH HAZARD: (ACUTE AND CHRONIC): Contains silica glass, which is considered a hazard by inhalation. IARC has classified it as a probable carcinogenic for humans.

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

CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: May aggravate preexisting upper respiratory and lung disease.

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

EMERGENCY FIRST AID PROCEDURES:

INGESTION: Do not induce vomiting - give large volumes of water. Seek medical attention.

SKIN: Wash with soap and water. If irritation develops seek medical attention.

EYES: Flush with water for 15 minutes. If irritation develops seek medical attention.

INHALATION: Remove to fresh air, drink water to clear throat and blow nose to evacuate dust.

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SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

IN CASE OF RELEASE OR SPILL: Avoid generating dusts during cleanup. If an excessive amount of dust is generated use a filter equipped vacuum and MSHA/NIOSH approved mask.

WASTE DISPOSAL METHOD: In accordance with local, state, and federal regulations.

STORAGE, HANDLING, AND SPECIAL PRECAUTIONS: Store at normal room temperatures and humidity.

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SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION: Minimize exposure to dust in accordance with good hygiene practices. If needed, use MSHA-NIOSH approved respirator.

VENTILATION: None required LOCAL EXHAUST: N.A. MECHANICAL: YES SPECIAL: N.A. OTHER: N.A.

PROTECTIVE GLOVES: Latex gloves are recommended

EYE PROTECTION: Goggles or full face shield

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Do not spill on clothing. Eyewash station

WORK/HYGIENIC PRACTICE: Follow safe hygiene practices.

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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

PREPARED BY: T. Joritz
Director Regulatory Affairs

Date: 03 January 2000

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FIRE 0 TOXICITY 1 REACTIVITY 0 SPECIAL

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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: CAVITY CONDITIONER

Chemical Name: N.A.

PRODUCT USE: Cavity Conditioning Agent

The following information is provided with regard to the toxicity and hazards of the pure components present in this product.

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

COMPONENT AND C.A.S.	EXPOSURE LIMITS	LD50/LC50	%
Polyacrylic acid (not listed)	TWA=10 ppm (ACGIH)	LD50=2500mg/kg (oral rat) LC50=N.E.	20-25%
Aluminum chloride Hexahydrate (7784-13-6)	TWA=2mg Al/m ³ (soluble salts) (ACGIH)	LD50=770mg/kg (oral, mouse) LC50=N.E.	1-5%

SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES

BOILING POINT:	101°C	SPECIFIC GRAVITY (H ₂ O=1):	1.18
VAPOR PRESSURE:	N.E.	MELTING POINT:	13°C
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: Blue, slightly viscous and odorless liquid

SECTION 4 - FIRE AND EXPLOSION DATA

FLASH POINT: Not flammable FLAMMABLE LIMITS: N.E.

EXTINGUISHING MEDIA: Alcohol foam

SPECIAL FIRE FIGHTING PROCEDURES: Full protective clothing and self-contained breathing apparatus

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

HAZARDOUS COMBUSTION PRODUCTS: Emits acrid smoke when heated beyond boiling point

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SECTION 5 - REACTIVITY DATA

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

CONDITIONS TO AVOID: High heat

INCOMPATIBILITY (MATERIALS TO AVOID): Alkaline, will inactivate product.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: N.E.

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SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION

Table with 9 columns: YES, NO, N.E., N.A., NTP, IARC, OSHA, OTHER. Rows include MUTAGENIC AFFECTS, TERATOGENIC AFFECTS, REPRODUCTIVE TOXIN, CARCINOGENICITY, SENSITIZER.

ROUTES OF ENTRY: INHALATION SKIN X INGESTION X

HEALTH HAZARD: (ACUTE AND CHRONIC): Acidic solution (pH =1.90), care should be taken to avoid contact with skin or eyes. Aluminum chloride Hexahydrate maybe toxic on ingestion.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: N.E.

CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N.E.