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 II LIQUID

FUJI II CAPSULES LIQUID

Chemical Name: N.A.

PRODUCT USE: Dental composite filling material - liquid component

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 ક્ર

Polyacrylic acid LD50 = 2500 mg/kg 40-50%TWA=10ppm

(not listed) (ACGIH) (oral rat)

LC50=N.E.

SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES

BOILING POINT: 101°C SPECIFIC GRAVITY $(H_2O = 1)$: 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

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.

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

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.

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

MERGENCY 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.

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: 1 November 97

Director Regulatory Affairs

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 2 REACTIVITY 0 SPECIAL ACID

MATERIAL SAFETY DATA SHEET

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COMMON NAME: FUJI II POWDER

FUJI II CAPSULES POWDER

Chemical Name: N.A.

PRODUCT USE: Dental composite filling material - powder component

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 %

Polyacrylic acid TWA=10ppm LD50 = 2500mg/kg 3-5

(not listed) (ACGIH) (oral rat)

LC50 = N.E.

Aluminosilicate TLV=10mg/m³ N.E. 90-95

glass (not listed) PEL=15mg/m³

(ACGIH)

SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES

BOILING POINT: N.E. SPECIFIC GRAVITY $(H_2O = 1)$: 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

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:

WILL NOT OCCUR: X WILL OCCUR: POLYMERIZATION:

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

YES NO N.E. N.A. NTP IARC OSHA OTHER

MUTAGENIC AFFECTS: X TERATOGENIC AFFECTS: X REPRODUCTIVE TOXIN: X

CARCINOGENICITY: X X (Group 2A)

SENSITIZER: X

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. Dusts of silica glass is also a known cause of silicosis, a non-cancerous lung disease.

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.

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.

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

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.

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: 1 November 97

Director Regulatory Affairs

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FIRE 0 TOXICITY 1 REACTIVITY 0 SPECIAL