

MATERIAL SAFETY DATA SHEET

SECTION 1 - SOURCE/IDENTITY/USE INFORMATIONMANUFACTURERSUPPLIER

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: PATTERN RESIN POWDER

Chemical Name: N.A.

PRODUCT USE: Patterns for tooth crowns, bridges, and partial denture framework (wax substitute).

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

<u>COMPONENT AND C.A.S.</u>	<u>EXPOSURE LIMITS</u>	<u>LD50/LC50</u>	<u>%</u>
Benzoyl Peroxide 94-36-0	TWA=5mg/m ³ (ACGIH)	N.E. ~	1%

SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES

BOILING POINT: N.E. SPECIFIC GRAVITY (H₂O = 1): 1.0
VAPOR PRESSURE: N.E. MELTING POINT: N.E.
VAPOR DENSITY: N.E. EVAPORATION RATE: N.E.
SOLUBILITY IN WATER: Insoluble ODOR THRESHOLD: N.A.
COEFFICIENT OF OIL/WATER DISTRIBUTION: N.E.

APPEARANCE AND ODOR: Pink free flowing powder

SECTION 4 - FIRE AND EXPLOSION DATA

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

EXTINGUISHING MEDIA: Water fog, carbon dioxide, dry chemical

SPECIAL FIRE FIGHTING PROCEDURES: Full protective equipment, including self-contained breathing apparatus.

SECTION 4 - FIRE AND EXPLOSION DATA - continued

UNUSUAL FIRE AND EXPLOSION HAZARDS: Peroxides and decomposition products are flammable and can ignite with explosive force if confined.

HAZARDOUS COMBUSTION PRODUCTS: On decomposition, Benzoyl Peroxide can produce toxic and flammable vapors and Biphenyl (TLV=0.2ppm) Carbon dioxide, Carbon monoxide

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SECTION 5 - REACTIVITY DATA

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

CONDITIONS TO AVOID: Avoid excess heat.

INCOMPATIBILITY (MATERIALS TO AVOID):
Strong acids, bases, oxidizing agents, aromatic tertiary amines.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: None known

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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 X SKIN X INGESTION X

HEALTH HAZARD: (ACUTE AND CHRONIC):

INHALATION: May cause irritation of the nose, throat, lungs.

INGESTION: May cause toxic affects.

SKIN: May cause irritation.

EYES: May cause irritation.

SIGNS AND SYMPTOMS OF OVEREXPOSURE:

Prolonged contact with eyes and skin may cause irritation. Inhalation may cause irritation of the nose, throat, and lungs. Ingestion may cause toxic affects.

CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N.A.

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

EMERGENCY FIRST AID PROCEDURES:

INHALATION: Remove victim to fresh air. Seek medical attention.

INGESTION: Do not induce vomiting; give plenty of water.
Seek medical attention.

SKIN: Wash with soap and water; rinse thoroughly.

EYES: Flush with water and seek medical attention.

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SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

IN CASE OF RELEASE OR SPILL:

Sweep up powder. Wash area with detergent and water.

WASTE DISPOSAL METHOD:

Dispose of in compliance with local, state and federal regulations.

STORAGE, HANDLING, AND SPECIAL PRECAUTIONS:

Store in a cool, dry place. Keep away from heat, open flames.

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SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION: Reduce exposure in accordance with good hygiene practice. If exposure limits are exceeded, use MSHA-NIOSH approved respirators for dusts, mists, fumes.

VENTILATION: LOCAL EXHAUST: As needed MECHANICAL: N.A.
 SPECIAL: N.A. OTHER: N.A.

PROTECTIVE GLOVES: Should not be necessary in powder form. When mixing with liquid component use disposable vinyl gloves.

EYE PROTECTION: Dust goggles

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Eyewash station

WORK/HYGIENIC PRACTICE: Follow routine 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

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	TOXICITY	REACTIVITY	SPECIAL OXY
0	1	1	

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COMMON NAME: PATTERN RESIN LIQUID

Chemical Name: N.A.

PRODUCT USE: Construction of temporary dental devices - 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

<u>COMPONENT AND C.A.S.</u>	<u>EXPOSURE LIMITS</u>	<u>LD50/LC50</u>	<u>%</u>
Methyl Methacrylate 80-62-6	TWA=100ppm (ACGIH) LC50=3750ppm/4hr	LD50=5.2 mg/kg (oral rat)	80%
2 Hydroxyethyl Methacrylate 868-77-9	N.E.	LD50=5888 mg/kg (oral rat) LC50=N.E.	16%

SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES

BOILING POINT: 101°C SPECIFIC GRAVITY (H₂O = 1): 1
VAPOR PRESSURE: N.E. MELTING POINT: N.A.
VAPOR DENSITY: N.E. EVAPORATION RATE (Butyl Acetate=1): Equal
SOLUBILITY IN WATER: Insoluble ODOR THRESHOLD: <1 ppm methyl methacrylate
COEFFICIENT OF OIL/WATER DISTRIBUTION: N.E.
APPEARANCE AND ODOR: Clear liquid, unpleasant odor.

SECTION 4 - FIRE AND EXPLOSION DATA

FLASH POINT: 11°C/52°F FLAMMABLE LIMITS: N.E.

EXTINGUISHING MEDIA: Alcohol foam, dry chemical, carbon dioxide

SECTION 4 - FIRE AND EXPLOSION DATA - continued

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

UNUSUAL FIRE AND EXPLOSION HAZARDS: When heated above the flashpoint: emits vapors, which when mixed with air, can burn or be explosive. Fine mists on sprays may be flammable at temperatures below the flash point. Sealed containers exposed to elevated temperatures may rupture explosively due to polymerization. Vapors are heavier than air and may travel to ignition source.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide, smoke

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SECTION 5 - REACTIVITY DATA

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

CONDITIONS TO AVOID: Heat and ignition sources

INCOMPATIBILITY (MATERIALS TO AVOID): Reducing and oxidizing agents. Material has strong solvent properties and can soften paint or rubber.

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

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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 X SKIN X INGESTION X

HEALTH HAZARD: (ACUTE AND CHRONIC):

INHALATION: May cause nose and throat irritation. May cause nervous system depression. Reports have associated repeated and prolonged overexposure to brain damage and nervous system damage. May cause irritation or burning of mucous membranes.

INGESTION: May cause abnormal liver and kidney function

SKIN: May cause irritation or burning of skin.

Repeated exposure may cause skin burns and allergic reactions.

EYES: May cause irritation or burning of eyes.

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

SIGNS AND SYMPTOMS OF OVEREXPOSURE: Progressive steps of inhalation overexposure: headache, dizziness, nausea, staggering gait, confusion, unconsciousness.

CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N.E.

EMERGENCY FIRST AID PROCEDURES:

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. 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. Wash clothes prior to reuse.

EYES: Immediately flush eyes with water. Seek medical attention.

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SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

IN CASE OF RELEASE OR SPILL: Eliminate source of ignition. Wear skin, eye, respiratory protection. Contain spill and keep out of sewers. Use absorbent to soak up liquid. Use non-sparking equipment and shovel into waste container.

WASTE DISPOSAL METHOD: Material is a hazardous waste, No. U162. Dispose of waste in facility permitted for hazardous waste in accordance with local, state and federal regulations.

STORAGE, HANDLING, AND SPECIAL PRECAUTIONS: Keep away from heat, sparks, flame, direct sunlight and elevated temperatures.

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SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION: Reduce exposure in accordance with safe hygiene practice. If exposure limits are exceeded, use a MSHA-NIOSH approved respirator for organic vapors.

VENTILATION: LOCAL EXHAUST: Yes
SPECIAL: N.A.

MECHANICAL: N.A.
OTHER: N.A.

PROTECTIVE GLOVES: Disposable vinyl gloves

SECTION 8 - CONTROL MEASURES: - continued

EYE PROTECTION: Chemical eye goggles and full face protection if necessary.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Eye wash station

WORK/HYGIENIC PRACTICE: Follow routine safe hygiene practices.

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SECTION 9- PREPARATION INFORMATION

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FIRE 4 TOXICITY 2 NFPA
 REACTIVITY 3 SPECIAL P

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