

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 a.m.-5:00 p.m. C.S.T.

Transportation Emergency No. 800-424-9300

COMMON NAME: COE-RECT REPAIR LIQUID

Chemical Name: N.A.

PRODUCT USE: Repair dentures - 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	%
Methyl Methacrylate 80-62-6	TWA=100ppm (ACGIH)	LD50=5.2mg/Kg (oral rat) LC50=3750 ppm/4hr.	60-100%

SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES

BOILING POINT: 101°C SPECIFIC GRAVITY (H₂O = 1): 0.940
VAPOR PRESSURE: 50 @86°C MELTING POINT: N.A.
VAPOR DENSITY: 3.5 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 FLAMMABLE LIMITS: N.E.

EXTINGUISHING MEDIA: Alcohol foam, dry chemical, carbon dioxide

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

SECTION 4 - FIRE AND EXPLOSION DATA

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

EXTINGUISHING MEDIA: Water fog, carbon dioxide, dry chemical

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

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

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

SECTION 5 - REACTIVITY DATA

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

CONDITIONS TO AVOID: Avoid heat.

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

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: None known

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): Prolonged contact may cause irritation of the nose, throat, lungs, skin and eyes. Produces toxic reaction if ingested.

CALIFORNIA PROP 65 WARNING: This product contains cadmium compounds, a chemical known to the State of California to cause cancer.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: N.E.

CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N.E.

SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION**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.

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: Consult local, state and federal regulations for acceptable disposal methods.

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

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: Recommended 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 good 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
Director Regulatory Affairs

Date: 1 November 97

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

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

		NFPA	
FIRE 0	TOXICITY 1	REACTIVITY 1	SPECIAL OXY

SECTION 4 - FIRE AND EXPLOSION DATA - continued

UNUSUAL FIRE AND EXPLOSION HAZARDS: When heated above the flashpoint: emit vapors, which when mixed with air, can burn or be explosive. Fine mists 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

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

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.

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

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

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.

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.

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

PROTECTIVE GLOVES: Disposable vinyl gloves

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

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Eye wash station

WORK/HYGIENIC PRACTICE: Follow routine 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
Director Regulatory Affairs

Date: 1 November 97

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

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FIRE	4	TOXICITY	2	NFPA REACTIVITY	3	SPECIAL	P
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COMMON NAME: COE-RECT LIQUID

Chemical Name: N.A.

PRODUCT USE: Denture reliner - 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	%
Methyl Methacrylate 80-62-6	TWA=100ppm (ACGIH) (oral rat)	LD50=5.2 mg/Kg	60-100%
Denatured Alcohol: Ethanol 64-17-5	TWA=1000ppm (ACGIH)	LC50=3750 ppm/4hr.	1-5%
Methanol 67-56-1	TWA=200ppm (ACGIH) STEL=250ppm (ACGIH)	LD50=5628 mg/Kg (oral rat) LC50=64000 ppm/4hr.	
Dibutyl Phthalate 84-74-2	TWA=5mg/m ³ (ACGIH)		15-40%

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: N.E.
 SOLUBILITY IN WATER: Insoluble
 ODOR THRESHOLD: <1 ppm as Methyl Methacrylate
 COEFFICIENT OF OIL/WATER DISTRIBUTION: N.E.

APPEARANCE AND ODOR: Colorless liquid with unpleasant odor

SECTION 4 - FIRE AND EXPLOSION DATA

FLASH POINT: 11°C - Closed Cup FLAMMABLE LIMITS: N.E.

EXTINGUISHING MEDIA: Water spray, dry chemical, foam, CO2

SPECIAL FIRE FIGHTING PROCEDURES:

Wear self contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

When heated above the flashpoint, emits flammable 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

SECTION 5 - REACTIVITY DATA

STABILITY:

STABLE:

UNSTABLE: X

POLYMERIZATION:

WILL NOT OCCUR:

WILL OCCUR: X

CONDITIONS TO AVOID: Heat and ignition sources. High heat.

INCOMPATIBILITY (MATERIALS TO AVOID):

Reducing and oxidizing agents. Material has strong solvent properties and can soften paint or rubber. Reaction of dibutyl phthalate and liquid chlorine may react explosively.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: None known

SECTION 6 - HEALTH HAZARD DATA and FIRST AID INFORMATION

	YES	NO	NE	NA	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

SECTION 6 -CONTINUED- HEALTH HAZARD DATA and FIRST AID INFORMATION**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 eyes, skin, and mucous membranes. Repeated exposure may cause skin burns and allergic reactions. May cause abnormal liver and kidney function. Contains methanol and ethanol. Prolonged exposure to ethanol may result in irritation of mucous membranes, headache, fatigue and narcosis. Methanol can result in acidosis and visual disturbances which may progress to permanent loss of vision.

SIGNS AND SYMPTOMS OF OVEREXPOSURE:

Progressive steps of inhalation overexposure: headache, dizziness, nausea, staggering gait, confusion, unconsciousness.

CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N.A.

EMERGENCY FIRST AID PROCEDURES:

INGESTION: If ingested, do not induce vomiting. Give one or two glasses of water and refer to medical attention.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

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

SKIN: Wash with soap and water. Wash clothes prior to reuse.

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

Eliminate source if 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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 Transportation Emergency No. 800-424-9300

COMMON NAME: COE-RECT POWDER

Chemical Name: N.A.

PRODUCT USE: Relining dentures - 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	%
Benzoyl Peroxide 94-36-0	TWA=5mg/m ³ (ACGIH)	N.E.	1-5%
Dibutyl Phthalate 84-74-2	TWA=5mg/m ³ (ACGIH)	N.E.	7-13%
Cadmium Compound 7440-43-9	TWA=0.01mg/m ³ as Cd total dust (ACGIH)	N.E.	<.1%

SECTION 3 - PHYSICAL/CHEMICAL PROPERTIES

BOILING POINT: N.A. SPECIFIC GRAVITY (H₂O = 1): 1.0
 VAPOR PRESSURE: N.A. MELTING POINT: N.E.
 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: Pink free flowing powder