



**EUCO # 456S MORTAR - .35 CU FT UNIT**

Version 1  
REVISION DATE: 06/14/2005

Print Date 07/13/2007

This is a kit that contains the following components:

- EUCO 456S MORTAR PART A
- EUCO 456 MORTAR PART B



**EUCO 456S MORTAR PART A**Version 1  
REVISION DATE: 06/14/2005

Print Date 07/13/2007

**SECTION 1 - PRODUCT IDENTIFICATION**

Trade name : EUCO 456S MORTAR PART A  
 Product code : 038 27

COMPANY : Euclid Chemical Company  
 19218 Redwood Road  
 Cleveland, OH 44110

Telephone : 1-800-321-7628  
 Emergency Phone: : U.S. only: 1-800-255-3924  
 International Users Call Collect: 1-813-248-0585

**SECTION 2 - HAZARDS IDENTIFICATION****Emergency Overview**

Gray. Liquid solution. Vapor may irritate respiratory tract. May cause nausea, headaches, and dizziness. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

**Acute Potential Health Effects/ Routes of Entry**

Inhalation : Vapor may irritate respiratory tract. May cause nausea, headaches, and dizziness.  
 Eyes : Direct contact may cause mild irritation. May cause temporary injury.  
 Ingestion : May cause gastrointestinal irritation, nausea, and vomiting.  
 Skin : May cause sensitization resulting in irritation, itching and redness.

**Aggravated Medical Conditions**

Pre-existing eye, skin, liver, kidney, and respiratory disorders may be aggravated by exposure.

**Chronic Health Effects**

Prolonged or repeated exposure to epoxy resin can cause irritation to skin, eyes, skin sensitization, temporary eye injury. Certain epoxy resins are reported to be mutagenic in some laboratory tests. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

**Target Organs:** Skin, Eye, Ingestion, Lung

**SECTION 3 - PRODUCT COMPOSITION**

Chemical Name	CAS-No.	Weight %
Epichlorohydrin polymer	25068-38-6	> 60.0
Neopentyl glycol diglycidyl ether	17557-23-2	10.0 - 30.0
Defoamer	NJ TSRN# 51721300-5479P	1.0 - 5.0

**SECTION 4 - FIRST AID MEASURES**

Get immediate medical attention for any significant overexposure.



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- Inhalation : Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.
- Eye contact : Flush with water for 15 minutes. If irritation persists, get medical attention.
- Skin contact : Wash area of contact thoroughly with hand cleaner followed by soap and water. If irritation, rash or other disorders develop, get medical attention immediately.
- Ingestion : Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

**SECTION 5 - FIRE FIGHTING MEASURES**

- Flash point : > 200 °F, > 93 °C
- Method : Setaflash Closed Cup
- Lower explosion limit : Not available.
- Upper explosion limit : Not available.
- Autoignition temperature : Not available.
- Extinguishing media : If water fog is ineffective, use carbon dioxide, dry chemical or foam.
- Hazardous combustion products : Smoke, fumes. Carbon monoxide and carbon dioxide can form.
- Protective equipment for firefighters : Water may be used to cool containers to minimize pressure build-up. Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA).
- Fire and explosion conditions : Closed container, may burst when exposed to extreme heat. Empty containers may contain ignitable vapors. Vapor concentrations in enclosed areas may ignite explosively. Vapors may travel to sources of ignition and flashback.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Use appropriate protective equipment. Avoid contact with material. Remove sources of ignition immediately. Stop flow of material if safe to do so. Contain spill and keep out of water courses. Ventilate area.

**SECTION 7 - HANDLING AND STORAGE**

Store under dry warehouse conditions away from heat and all ignition sources. Store in a cool, well ventilated area. Prevent inhalation of vapor, ingestion, and contact with skin eyes and clothing. Keep container closed when not in use. Precautions also apply to emptied containers. Do not smoke, weld, generate sparks, or use flame near container. Change soiled work clothes frequently. Clean hands thoroughly after handling.

**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Personal protection equipment**



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- Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved organic vapor or supplied air respirator when airborne contaminant level(s) are expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use.
- Hand protection : Use suitable impervious nitrile or neoprene gloves and protective apparel to reduce exposure.
- Eye protection : Chemical splash goggles.
- Protective measures : Use professional judgment in the selection, care, and use.
- Engineering measures : Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. Use general ventilation and/ or local exhaust to reduce the airborne contaminant concentration below the exposure limit listed in the MSDS

**Exposure Limits**

No known components with exposure limits.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

- Form : Liquid solution
- Color : Gray
- Odor : Solvent
- pH : Not available.
- Vapour pressure : Not available.
- Vapor density : Heavier than air
- Melting point/range : Not available.
- Freezing point : Not available.
- Boiling point/range : > 500 °F, > 260 °C
- Water solubility : Negligible
- Specific Gravity : 1.16
- % Volatile Weight : 0 %

**SECTION 10 - REACTIVITY / STABILITY**

- Substances to avoid : Epoxy curing agents. Amines and oxidizing agents.
- Stability : Material is stable under normal storage, handling, and use.
- Hazardous polymerization : Will not occur.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

No Data Available



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**SECTION 12 - ECOLOGICAL INFORMATION**

No Data Available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Disposal Method : Recycle or dispose of in compliance with local, provincial and federal regulations.

**SECTION 14 - TRANSPORTATION / SHIPPING DATA**

**TDG / DOT Shipping Description:**

NOT REGULATED

**SECTION 15 - REGULATORY INFORMATION**

**North American Inventories:**

All components are listed or exempt from the TSCA inventory.  
 This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

**U.S. Federal Regulations:**

SARA 313 Components : None present or none present in regulated quantities.

SARA 311/312 Hazards : Acute Health Hazard

OSHA Hazardous Components :

OSHA Status: Considered : Irritant  
 hazardous based on the  
 following criteria:

OSHA Flammability : Not Regulated

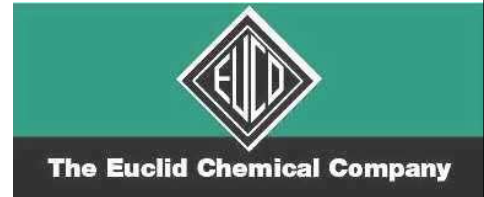
Regulatory VOC (less water and : 0 g/l  
 exempt solvent)

VOC Method 310 : 0 %

**U.S. State Regulations:**

Penn RTK Components	:	Epichlorohydrin polymer	25068-38-6
		Neopentyl glycol diglycidyl ether	17557-23-2
NJ RTK Components	:	Epichlorohydrin polymer	25068-38-6
		Neopentyl glycol diglycidyl ether	17557-23-2
		Defoamer	NJ TSRN# 51721300-5479P

Chemicals known to the State of California to cause cancer birth defects and/or other reproductive harm:



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108-88-3 Toluene  
 1333-86-4 Carbon Black

**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	1
Flammability	2
Reactivity	0
PPE	

0 = Minimum  
 1 = Slight  
 2 = Moderate  
 3 = Serious  
 4 = Severe

**Further information:**

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

**Prepared by: Rich Mikol**

**Legend**

ACGIH - American Conference of Governmental Hygienists  
 CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act  
 DOT - Department of Transportation  
 DSL - Domestic Substance List  
 EPA - Environmental Protection Agency  
 HMIS - Hazardous Materials Information System  
 IARC - International Agency for Research on Cancer  
 MSHA - Mine Safety Health Administration  
 NDSL - Non-Domestic Substance List  
 NIOSH - National Institute for Occupational Safety and Health  
 NTP - National Toxicology Program  
 OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit  
 RCRA - Resource Conservation and Recovery Act  
 RTK - Right To Know  
 SARA - Superfund Amendments and Reauthorization Act  
 STEL - Short Term Exposure Limit  
 TLV - Threshold Limit Value  
 TSCA - Toxic Substances Control Act  
 TWA - Time Weighted Average  
 V - Volume  
 VOC - Volatile Organic Compound  
 WHMIS - Workplace Hazardous Materials Information System





**EUCO 456 MORTAR PART B**Version 1  
REVISION DATE: 06/14/2005

Print Date 07/13/2007

**SECTION 1 - PRODUCT IDENTIFICATION**

Trade name : EUCO 456 MORTAR PART B  
Product code : 038 27

COMPANY : Euclid Chemical Company  
19218 Redwood Road  
Cleveland, OH 44110

Telephone : 1-800-321-7628  
Emergency Phone: : U.S. only: 1-800-255-3924  
International Users Call Collect: 1-813-248-0585

Product use : Curative

**SECTION 2 - HAZARDS IDENTIFICATION****Emergency Overview**

Clear. Liquid. Severely irritating to the respiratory tract. May cause chemical burns to the respiratory system. May cause coughing and wheezing. May cause nausea, headaches, and dizziness. Move to fresh air. If required, artificial respiration or administration of oxygen can be performed by trained personnel. Remove to fresh air. Get immediate medical attention.

**Acute Potential Health Effects/ Routes of Entry**

Inhalation : Severely irritating to the respiratory tract. May cause chemical burns to the respiratory system. May cause coughing and wheezing. May cause nausea, headaches, and dizziness.

Eyes : Vapors or liquid may cause tearing, blurred vision, severe irritation, and possible chemical burns.

Ingestion : May cause gastrointestinal irritation, nausea, and vomiting. May cause chemical burns to stomach, mouth, nose, and throat.

Skin : May cause itching, reddening, inflammation. May cause severe burns, blistering and skin damage. May cause sensitization resulting in irritation, itching and redness. May cause a rash.

**Aggravated Medical Conditions**

Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

**Chronic Health Effects**

May cause sensitization by contact. Prolonged skin contact may cause irritation, burns or dermatitis. Repeated overexposure to vapors and/or material may injure the liver, kidneys and respiratory system unless suitable engineering controls and/or personal protective equipment are used. May aggravate persons sensitized to amines. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

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**SECTION 3 - PRODUCT COMPOSITION**

Chemical Name	CAS-No.	Weight %
Triethylenetetramine	112-24-3	40.0 - 70.0
Modified aliphatic amine	NJ TSRN# 51721300-5810P	15.0 - 40.0
4-tert-Butylphenol	98-54-4	15.0 - 40.0
Benzyl alcohol	100-51-6	7.0 - 13.0

**SECTION 4 - FIRST AID MEASURES**

Get immediate medical attention for any significant overexposure.

- Inhalation : Move to fresh air. If required, artificial respiration or administration of oxygen can be performed by trained personnel. Remove to fresh air. Get immediate medical attention.
- Eye contact : Flush with water for at least 15 minutes while holding eye lids apart. Get medical attention immediately.
- Skin contact : Clean area of contact thoroughly using soap and water. If irritation, rash or other disorders develop, get medical attention immediately.
- Ingestion : Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

**SECTION 5 - FIRE FIGHTING MEASURES**

- Flash point : > 200 °F, > 93 °C
- Method : Setaflash Closed Cup
- Lower explosion limit : Not available.
- Upper explosion limit : Not available.
- Autoignition temperature : Not available.
- Extinguishing media : If water fog is ineffective, use carbon dioxide, dry chemical or foam.
- Hazardous combustion products : Carbon monoxide and carbon dioxide can form. Smoke, fumes. Nitrogen oxides can form.
- Protective equipment for firefighters : Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA).
- Fire and explosion conditions : Product may ignite if heated in excess of its flash point. Vapors may travel to sources of ignition and flashback. Vapor concentrations in enclosed areas may ignite explosively. Empty containers may contain ignitable vapors.

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**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Use appropriate protective equipment. Avoid contact with material. Remove sources of ignition immediately. Stop flow of material if safe to do so. Contain spill and keep out of water courses. Ventilate area.

**SECTION 7 - HANDLING AND STORAGE**

Prevent inhalation of vapor, ingestion, and contact with skin eyes and clothing. Keep container closed when not in use. Precautions also apply to emptied containers. Do not smoke, weld, generate sparks, or use flame near container. Do not use in confined or poorly ventilated areas. Personal protective equipment must be worn during maintenance or repair of contaminated mixer, reactor, or other equipment. Store under dry warehouse conditions away from heat and all ignition sources.

**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION****Personal protection equipment**

- Respiratory protection : Wear NIOSH/MSHA approved vapor respirator with appropriate cartridge when the vapor concentration is expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use.
- Hand protection : Use suitable impervious nitrile or neoprene gloves and protective apparel to reduce exposure.
- Eye protection : Wear chemical safety goggles and/or face shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes with contaminated body parts or materials. Have eye washing facilities readily available.
- Skin and body protection : Prevent contact with shoes and clothing. Use rubber apron and overshoes.
- Protective measures : Inspect and replace equipment at regular intervals. Use professional judgment in the selection, care, and use.
- Engineering measures : Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. Use local exhaust when the general ventilation is inadequate.

**Exposure Limits**

No known components with exposure limits.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

- Form : Liquid
- Color : Clear
- Odor : Amine
- pH : Not available.
- Vapour pressure : Not available.
- Vapor density : Heavier than air

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Melting point/range : Not available.  
Freezing point : Not available.  
Boiling point/range : > 500 °F, > 260 °C  
Water solubility : Negligible  
Specific Gravity : 1.075  
% Volatile Weight : 21 %

**SECTION 10 - REACTIVITY / STABILITY**

Substances to avoid : Oxidizing agents.Epoxies.Isocyanates.Acids.  
Stability : Material is stable under normal storage, handling, and use.  
Hazardous polymerization : Will not occur under normal conditions.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Benzyl alcohol, CAS-No.: 100-51-6  
Acute oral toxicity (LD-50 oral) 1,230 - 3,100 mg/kg ( Rat )  
Acute inhalation toxicity (LC-50) 1,000 mg/l ( Rat )

**SECTION 12 - ECOLOGICAL INFORMATION**

No Data Available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Disposal Method : Dispose of hazardous waste according to all local, state, federal and provincial regulations.

**SECTION 14 - TRANSPORTATION / SHIPPING DATA****TDG / DOT Shipping Description:**

CORROSIVE LIQUID, N.O.S. (Contains Triethylenetetramine), 8, UN1760, PG II

**SECTION 15 - REGULATORY INFORMATION****North American Inventories:**

All components are listed or exempt from the TSCA inventory.

This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

**U.S. Federal Regulations:**



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None present or none present in regulated quantities.

SARA 311/312 Hazards : Acute Health Hazard

OSHA Hazardous Components :

OSHA Status: Considered : Irritant  
 hazardous based on the  
 following criteria:

OSHA Flammability : Not Regulated

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:  
 0.0000 g/l

**U.S. State Regulations:**

MASS RTK Components	:	Triethylenetetramine	112-24-3
		Benzyl alcohol	100-51-6
Penn RTK Components	:	Triethylenetetramine	112-24-3
		Modified aliphatic amine	NJ TSRN# 51721300-5810P
		4-tert-Butylphenol	98-54-4
		Benzyl alcohol	100-51-6
NJ RTK Components	:	Triethylenetetramine	112-24-3
		Modified aliphatic amine	NJ TSRN# 51721300-5810P
		4-tert-Butylphenol	98-54-4
		Benzyl alcohol	100-51-6

Chemicals known to the State of California to cause cancer birth defects and/or other reproductive harm:  
 None known.

**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	2
Flammability	2
Reactivity	1
PPE	

0 = Minimum  
 1 = Slight  
 2 = Moderate  
 3 = Serious  
 4 = Severe

**Further information:**

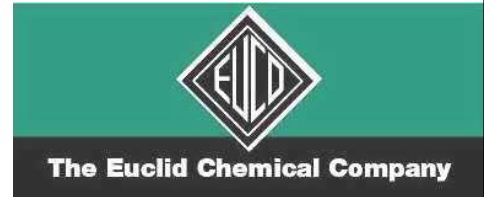
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**Prepared by: Rich Mikol**

**Legend**

ACGIH - American Conference of Governmental Hygienists

PEL - Permissible Exposure Limit



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CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act  
DOT - Department of Transportation  
DSL - Domestic Substance List  
EPA - Environmental Protection Agency  
HMIS - Hazardous Materials Information System  
IARC - International Agency for Research on Cancer  
MSHA - Mine Safety Health Administration  
NDSL - Non-Domestic Substance List  
NIOSH - National Institute for Occupational Safety and Health  
NTP - National Toxicology Program  
OSHA - Occupational Safety and Health Administration

RCRA - Resource Conservation and Recovery Act  
RTK - Right To Know  
SARA - Superfund Amendments and Reauthorization Act  
STEL - Short Term Exposure Limit  
TLV - Threshold Limit Value  
TSCA - Toxic Substances Control Act  
TWA - Time Weighted Average  
V - Volume  
VOC - Volatile Organic Compound  
WHMIS - Workplace Hazardous Materials Information System