



VERTICOAT

Version 2.
REVISION DATE: 09/12/2008

Print Date 09/13/2008

This is a kit that contains the following components:

VERTICOAT
VERTICOAT LIQUID

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SECTION 1 - PRODUCT IDENTIFICATION

Trade name : VERTICOAT
 Product code : 046B 96

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

Telephone : 1-800-321-7628
 Emergency Phone: : U.S. only: 1-800-424-9300
 International Users Call Collect: 1-703-527-3887

SECTION 2 - HAZARDS IDENTIFICATION**Emergency Overview**

Gray. Powder. Dust may irritate nose and throat. Dust irritating to the respiratory tract. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

Acute Potential Health Effects/ Routes of Entry

Inhalation : Dust may irritate nose and throat. Dust irritating to the respiratory tract.
 Eyes : Direct contact may cause severe irritation. May cause mechanical irritation or abrasion, and possible chemical burns. May cause temporary injury.
 Ingestion : May cause irritation to the mouth, throat and stomach. May cause gastrointestinal irritation, nausea, and vomiting.
 Skin : May cause severe irritation. May cause dryness, cracking, irritation, and chemical burns. May produce cement dermatitis due to primary irritation from alkaline, hydroscopic and abrasive properties.

Aggravated Medical Conditions

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

Chronic Health Effects

Inhalation of crystalline silica (quartz) can cause cancer based on animal data, and IARC concludes sufficient evidence in humans (Group 1). Prolonged and repeated overexposure to free crystalline silica dust above the TLV level may cause scarring of the lungs with cough and shortness of breath. A delayed lung injury, silicosis may result from breathing free silica.

SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	40.0 - 70.0
Portland cement	65997-15-1	30.0 - 60.0
Calcium salt	7778-18-9	1.0 - 5.0
Calcium nitrate	10124-37-5	1.0 - 5.0



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SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment

- Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved dust respirator where airborne concentrations are expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use.
- Hand protection : Use suitable impervious rubber or vinyl gloves and protective apparel to reduce exposure.
- Eye protection : Wear appropriate 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.
- Protective measures : Use professional judgment in the selection, care, and use. Wear gloves, head coverings and full body clothing as necessary to prevent skin irritation. Washable or disposable clothing may be used. Do not take unwashed clothing home. Work clothes should be washed separately from other clothing and the washing machine rinsed thoroughly following use. Inform the launderer of the proper procedures. Store work clothes and street clothes separately to prevent contamination.
- 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

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Regulation</u>	<u>Limit</u>	<u>Form</u>
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	OSHA TWA:	0.1 mg/m3	Respirable.
		OSHA TWA:	0.3 mg/m3	Total dust.
		OSHA PEL:	15 mg/m3	Total dust.
		OSHA PEL:	5 mg/m3	Respirable fraction.
		ACGIH TWA:	0.025 mg/m3	Respirable fraction.
Portland cement	65997-15-1	ACGIH TWA:	10 mg/m3	Respirable fraction. Total dust.
		OSHA PEL:	5 mg/m3	
		OSHA PEL:	15 mg/m3	
Calcium salt	7778-18-9	ACGIH TWA:	10 mg/m3	Respirable fraction. Total dust. Total dust. Respirable fraction. Inhalable fraction.
		OSHA PEL:	5 mg/m3	
		OSHA PEL:	15 mg/m3	
		OSHA TWA:	15 mg/m3	
		OSHA TWA:	5 mg/m3	
		ACGIH TWA:	10 mg/m3	



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Chemical Name	CAS Number	Regulation	Limit	Form
Calcium oxide	1305-78-8	ACGIH TWA: OSHA PEL: OSHA TWA: OSHA TWA:	2 mg/m3 5 mg/m3 15 mg/m3 5 mg/m3	Total dust. Respirable fraction.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

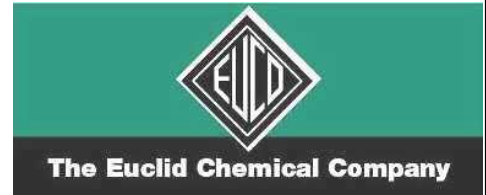
Form : Powder
 Color : Gray
 Odor : None
 pH : Not available.
 Vapour pressure : Not available.
 Vapor density : Not available.
 Melting point/range : Not available.
 Freezing point : Not available.
 Boiling point/range : Not available.
 Water solubility : Miscible
 Specific Gravity : 2.75
 % Volatile Weight : 0.4 %

SECTION 10 - REACTIVITY / STABILITY

Substances to avoid : Not Applicable.
 Stability : Material is stable under normal storage, handling, and use.
 Hazardous polymerization : Will not occur under normal conditions.

SECTION 11 - TOXICOLOGICAL INFORMATION

Calcium nitrate, CAS-No.: 10124-37-5
 Acute oral toxicity (LD-50 oral) 302 mg/kg (Rat)



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SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Method : Not regulated under RCRA. Dispose of in compliance with state and local regulations.
Do not incinerate.

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 : Calcium nitrate 10124-37-5

SARA 311/312 Hazards : Acute Health Hazard
Chronic Health Hazard

OSHA Hazardous Components :

Crystalline Silica (Quartz)/ Silica Sand 14808-60-7
Portland cement 65997-15-1
Calcium salt 7778-18-9
Calcium nitrate 10124-37-5
Calcium oxide 1305-78-8

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

OSHA Flammability : Not Regulated

Regulatory VOC (less water and : 0 g/l
exempt solvent)
VOC Method 310 : 0 %

Chemical is listed as an IARC, NTP, OSHA, or ACGIH Carcinogen:
Crystalline Silica (Quartz)/ Silica Sand 14808-60-7

U.S. State Regulations:



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MASS RTK Components	:	Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
		Portland cement	65997-15-1
		Calcium salt	7778-18-9
		Calcium oxide	1305-78-8
Penn RTK Components	:	Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
		Portland cement	65997-15-1
		Calcium salt	7778-18-9
		Calcium oxide	1305-78-8
NJ RTK Components	:	Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
		Portland cement	65997-15-1
		Calcium salt	7778-18-9
		Calcium nitrate	10124-37-5
		Calcium oxide	1305-78-8

WARNING! Contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm:
14808-60-7 Crystalline Silica (Quartz)/ Silica Sand

SECTION 16 - OTHER INFORMATION

HMIS Rating :

Health	1
Flammability	0
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

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



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OSHA - Occupational Safety and Health Administration

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 Product code : 046B 96

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

Telephone : 1-800-321-7628
 Emergency Phone: : U.S. only: 1-800-424-9300
 International Users Call Collect: 1-703-527-3887

Product use : Admixture

SECTION 2 - HAZARDS IDENTIFICATION**Emergency Overview**

White. Liquid. No serious effects anticipated under normal conditions of use. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

Acute Potential Health Effects/ Routes of Entry

Inhalation : No serious effects anticipated under normal conditions of use.
 Eyes : Direct contact may cause mild irritation.
 Ingestion : May cause gastrointestinal irritation, nausea, and vomiting.
 Skin : May cause mild irritation.

Aggravated Medical Conditions

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

Chronic Health Effects

Fillers are encapsulated and not expected to be released from product under normal conditions of use.

SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Water	7732-18-5	> 60.0
Acrylic Polymer	NJ TSRN# 51721300-5797P	1.0 - 5.0

SECTION 4 - FIRST AID MEASURES

Get immediate medical attention for any significant overexposure.

Inhalation : Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get



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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 : Get medical attention. Do not induce vomiting.

Notes to physician : Not applicable.

SECTION 5 - FIRE FIGHTING MEASURES

Flash point : Not available.

Method : Not applicable.

Lower explosion limit : Not available.

Upper explosion limit : Not available.

Autoignition temperature : Not available.

Extinguishing media : This product is not expected to burn under normal conditions of use.

Hazardous combustion products : Carbon monoxide and carbon dioxide can form. Smoke, fumes.

Protective equipment for firefighters : Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA).

Fire and explosion conditions : This product not expected to ignite under normal conditions of use.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Transfer to appropriate container for disposal. Stop flow. Contain spill. Keep out of water courses. Absorb spill in sand, earth or other suitable material. Transfer to appropriate container for disposal. Use appropriate protective equipment. Avoid contact with material.

SECTION 7 - HANDLING AND STORAGE

Handle in compliance with common hygienic practices. Clean hands thoroughly after handling. Keep from freezing. Do not use in confined or poorly ventilated areas. 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. Store in sealed containers in a dry, ventilated warehouse location above freezing.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment

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- Respiratory protection : Not required under normal conditions of use. Wear appropriate, NIOSH/MSHA approved respirator with combination particulate filter and vapor/gas removing cartridge when the ventilation is not adequate or if it is necessary to abrade or grind surfaces coated with this product.
- Hand protection : Use suitable impervious rubber or vinyl gloves and protective apparel to reduce exposure.
- Eye protection : Wear appropriate 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 : Other equipment not normally required. Use professional judgment in the selection, care, and use.
- Engineering measures : Not required under normal conditions of use. 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 : White
- Odor : Slight Ammonia
- pH : 10
- Vapour pressure : Not available.
- Vapor density : Heavier than air
- Melting point/range : Not available.
- Freezing point : Not available.
- Boiling point/range : 212 F, 100 C
- Water solubility : Soluble
- Specific Gravity : 1.02
- % Volatile Weight : 97.3 %

SECTION 10 - REACTIVITY / STABILITY

- Substances to avoid : Strong acids. Strong bases.
- Stability : Stable
- Hazardous polymerization : Will not occur.



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SECTION 11 - TOXICOLOGICAL INFORMATION

No Data Available

SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Method : Waste not regulated under RCRA. Dispose of in compliance with state and local 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 : Based on an evaluation of the components used, this product does not contain hazardous ingredients identified as per 29 CFR 1910.1200

OSHA Hazardous Components :

OSHA Flammability : Not Regulated

Regulatory VOC (less water and exempt solvent) : 83 g/l
VOC Method 310 : 0 %

U.S. State Regulations:

Penn RTK Components : Water 7732-18-5

NJ RTK Components : Water 7732-18-5
Acrylic Polymer NJ TSRN# 51721300-5797P



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WARNING! Contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm:
None known.

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Further information:

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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