



EUCLID CHEMICAL

Version: 3.1  
Revision Date: 11/17/2022

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This is a kit that contains the following components:  
VERTICOAT  
VERTICOAT LIQUID



# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** VERTICOAT  
**Product Code:** 046B 96

### Recommended use and restriction on use

**Recommended use:** Cement, Portland, chemicals  
**Restrictions on use:** Not known.

### Manufacturer/Importer/Supplier/Distributor Information

EUCLID CHEMICAL COMPANY  
19218 REDWOOD ROAD  
CLEVELAND OH 44110  
US

**Contact person:** EH&S Department  
**Telephone:** 216-531-9222  
**Emergency telephone number:** 1-800-424-9300 (US); 1-613-996-6666 (Canada)

## 2. Hazard(s) identification

### Hazard Classification

#### Health Hazards

Acute toxicity (Oral)	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 1
Skin sensitizer	Category 1
Carcinogenicity	Category 1A
Specific Target Organ Toxicity - Single Exposure	Category 3 <sup>1</sup>
Specific Target Organ Toxicity - Repeated Exposure	Category 1 <sup>2</sup>

#### Target Organs

1. Respiratory tract irritation.
2. Lung

#### Unknown toxicity - Health

Acute toxicity, oral	96.41 %
Acute toxicity, dermal	96.5 %
Acute toxicity, inhalation, vapor	99.47 %
Acute toxicity, inhalation, dust or mist	43.62 %

### Label Elements

**Hazard Symbol:****Signal Word:**

Danger

**Hazard Statement:**

Harmful if swallowed.  
Causes skin irritation.  
Causes serious eye damage.  
May cause an allergic skin reaction.  
May cause cancer.  
May cause respiratory irritation.  
Causes damage to organs through prolonged or repeated exposure.

**Precautionary Statements****Prevention:**

Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray.

**Response:**

IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. Immediately call a POISON CENTER/doctor. Specific treatment (see on this label). Wash contaminated clothing before reuse.

**Storage:**

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

**Disposal:**

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Hazard(s) not otherwise classified (HNOC):**

None.

**3. Composition/information on ingredients****Mixtures**



Chemical Identity	CAS number	Content in percent (%)*
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	50 - <100%
Portland cement	65997-15-1	20 - <50%
Calcium nitrate	10124-37-5	1 - <5%
Calcium oxide	1305-78-8	1 - <3%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### 4. First-aid measures

##### Description of necessary first-aid measures

<b>Inhalation:</b>	Move to fresh air.
<b>Skin Contact:</b>	Get medical attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.
<b>Eye contact:</b>	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.
<b>Ingestion:</b>	Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
<b>Personal Protection for First-aid Responders:</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

##### Most important symptoms/effects, acute and delayed

<b>Symptoms:</b>	Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. Extreme irritation of eyes and mucous membranes, including burning and tearing. Respiratory tract irritation.
<b>Hazards:</b>	No data available.

##### Indication of immediate medical attention and special treatment needed

<b>Treatment:</b>	Symptoms may be delayed.
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#### 5. Fire-fighting measures

<b>General Fire Hazards:</b>	No unusual fire or explosion hazards noted.
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##### Suitable (and unsuitable) extinguishing media

<b>Suitable extinguishing media:</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media:</b>	Do not use water jet as an extinguisher, as this will spread the fire.

<b>Specific hazards arising from the chemical:</b>	During fire, gases hazardous to health may be formed.
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**Special protective equipment and precautions for fire-fighters**

<b>Special fire-fighting procedures:</b>	No data available.
<b>Special protective equipment for fire-fighters:</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**6. Accidental release measures**

<b>Personal precautions, protective equipment and emergency procedures:</b>	See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.
<b>Accidental release measures:</b>	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.
<b>Methods and material for containment and cleaning up:</b>	Collect spillage in containers, seal securely and deliver for disposal according to local regulations.
<b>Environmental Precautions:</b>	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

**7. Handling and storage****Handling**

<b>Technical measures (e.g. Local and general ventilation):</b>	Mechanical ventilation or local exhaust ventilation may be required. Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of dust.
<b>Safe handling advice:</b>	Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Use mechanical ventilation in case of handling which causes formation of dust. Do not taste or swallow. Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Do not get in eyes. Avoid contact with skin. Avoid contact with eyes, skin, and clothing.
<b>Contact avoidance measures:</b>	No data available.
<b>Hygiene measures:</b>	Observe good industrial hygiene practices. Do not eat, drink or smoke when using the product. Wash hands after handling. Wash hands before breaks and immediately after handling the product. Do not get in eyes. Wash contaminated clothing before reuse. Avoid contact with skin. Contaminated work clothing should not be allowed out of the workplace.

**Storage**

<b>Safe storage conditions:</b>	Store locked up.
<b>Safe packaging materials:</b>	No data available.



**8. Exposure controls/personal protection**

**Control Parameters**

**Occupational Exposure Limits**

Chemical Identity	Type	Exposure Limit Values	Source
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	TWA	0.05 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended (03 2016)
	OSHA_ACT	0.025 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended (03 2016)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	PEL	0.05 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (03 2016)
Crystalline Silica (Quartz)/ Silica Sand - Respirable.	TWA	2.4 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)
	TWA	0.1 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.025 mg/m3	US. ACGIH Threshold Limit Values, as amended (02 2020)
Portland cement - Respirable fraction.	TWA	1 mg/m3	US. ACGIH Threshold Limit Values, as amended (2011)
Portland cement - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Portland cement - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Portland cement	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)
Calcium oxide	TWA	2 mg/m3	US. ACGIH Threshold Limit Values, as amended (2008)
	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)



Chemical name	Type	Exposure Limit Values	Source
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.10 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	TWA	0.1 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.025 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (06 2020)
Portland cement - Total dust.	TWA	10 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Portland cement - Respirable dust.	TWA	5 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Portland cement - Respirable.	TWA	1 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (06 2017)
Portland cement - Respirable fraction.	TWA	1 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (08 2017)
Calcium oxide	TWA	2 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Calcium oxide	TWA	2 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (12 2007)
Calcium oxide	TWA	2 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Magnesium oxide - Respirable dust and/or fume. - as Mg	STEL	10 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Magnesium oxide - Inhalable fume.	TWA	10 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Magnesium oxide - Respirable dust and/or fume. - as Mg	TWA	3 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Magnesium oxide - Inhalable fraction.	TWA	10 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Magnesium oxide - Inhalable dust.	TWA	10 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020)
Amorphous silica - Respirable fraction.	TWA	3 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (06 2020)
Amorphous silica - Inhalable fraction.	TWA	10 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)
Amorphous silica - Respirable particles.	TWA	3 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)
Amorphous silica - Total dust.	TWA	10 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020)



Amorphous silica - Respirable fraction.	TWA	3 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)
Amorphous silica - Total dust.	TWA	10 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (06 2020)
Amorphous silica - Inhalable particles.	TWA	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)

**Appropriate Engineering Controls**

Mechanical ventilation or local exhaust ventilation may be required. Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of dust.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection:**

Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield.

**Skin Protection**

**Hand Protection:**

Additional Information: Use suitable protective gloves if risk of skin contact.

**Skin and Body Protection:**

Wear suitable protective clothing. Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

**Respiratory Protection:**

In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:**

Observe good industrial hygiene practices. Do not eat, drink or smoke when using the product. Wash hands after handling. Wash hands before breaks and immediately after handling the product. Do not get in eyes. Wash contaminated clothing before reuse. Avoid contact with skin. Contaminated work clothing should not be allowed out of the workplace.

**9. Physical and chemical properties**

**Appearance**

<b>Physical state:</b>	solid
<b>Form:</b>	Powder
<b>Color:</b>	Gray
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Melting point/freezing point:</b>	No data available.
<b>Initial boiling point and boiling range:</b>	No data available.
<b>Flash Point:</b>	No data available.
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No

**Upper/lower limit on flammability or explosive limits**

<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper:</b>	No data available.
<b>Explosive limit - lower:</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	No data available.
<b>Relative density:</b>	2.75
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Miscible with water.
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

**10. Stability and reactivity**

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	Avoid heat or contamination.
<b>Incompatible Materials:</b>	No data available.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

**11. Toxicological information****Information on likely routes of exposure**

<b>Inhalation:</b>	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
<b>Skin Contact:</b>	May be harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
<b>Eye contact:</b>	Causes serious eye damage.
<b>Ingestion:</b>	Harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.



**Eye contact:** No data available.

**Ingestion:** No data available.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

**Oral**

**Product:** ATEmix: 523.27 mg/kg

**Dermal**

**Product:** ATEmix: 2,615.84 mg/kg

**Inhalation**

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s):**

Crystalline Silica  
(Quartz)/ Silica Sand LC 50: > 5.0 mg/l

Calcium oxide LC 50 (Rat): 40 mg/m<sup>3</sup>

#### Repeated dose toxicity

**Product:** No data available.

#### Skin Corrosion/Irritation

**Product:** No data available.

**Specified substance(s):**

Calcium nitrate in vivo (Rabbit): Not irritant , 1 - 72 h

Calcium oxide in vivo (Rabbit): Irritating , 24 - 72 h

#### Serious Eye Damage/Eye Irritation

**Product:** No data available.

**Specified substance(s):**

Calcium nitrate Rabbit, 24 - 72 hrs: Category 1

Calcium oxide Rabbit, 1 hrs: Irritating

#### Respiratory or Skin Sensitization

**Product:** No data available.

#### Carcinogenicity

**Product:** No data available.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

Crystalline Silica (Quartz)/ Silica Sand Overall evaluation: Carcinogenic to humans.

Calcium nitrate Overall evaluation: Probably carcinogenic to humans.

**US. National Toxicology Program (NTP) Report on Carcinogens:**

Crystalline Silica (Quartz)/ Silica Sand Known To Be Human Carcinogen.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:**

Crystalline Silica (Quartz)/ Silica Sand Cancer

**Germ Cell Mutagenicity**

**In vitro**  
**Product:** No data available.

**In vivo**  
**Product:** No data available.

**Reproductive toxicity**  
**Product:** No data available.

**Specific Target Organ Toxicity - Single Exposure**  
**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**  
**Product:** No data available.

**Target Organs**

Specific Target Organ Toxicity - Single Exposure: Respiratory tract irritation.

Specific Target Organ Toxicity - Repeated Exposure: Lung

**Aspiration Hazard**  
**Product:** No data available.



**Other effects:** Constituents of this product may include crystalline silica which, if in inhalable form, may cause silicosis, a form of progressive pulmonary fibrosis. Inhalable crystalline silica is listed by IARC as a group I carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a known human carcinogen. Constituents may also contain asbestiform or non-asbestiform tremolite or other silicates as impurities, and above de minimis exposure to these impurities in inhalable form may be carcinogenic or cause other serious lung problems.

## 12. Ecological information

### Ecotoxicity:

#### Acute hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Specified substance(s):

Calcium nitrate LC 50 (Oncorhynchus mykiss, 96 h): > 100 mg/l  
LC 50 (Oncorhynchus mykiss, 96 h): > 98.9 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study

Calcium oxide LC 100 (Poecilia reticulata, 96 h): 560 mg/l Experimental result, Key study

##### Aquatic Invertebrates

**Product:** No data available.

##### Specified substance(s):

Calcium nitrate EC 50 (Daphnia magna, 48 h): 490 mg/l  
EC 50 (Daphnia magna, 48 h): 490 mg/l read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance (structural analogue or surrogate), Key study

Calcium oxide EC 50 (Daphnia magna, 48 h): > 100 mg/l read-across based on grouping of substances (category approach) Read-across based on grouping of substances (category approach), Key study

#### Chronic hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Specified substance(s):

Calcium oxide NOAEL (Oncorhynchus mykiss): 307 mg/l read-across based on grouping of substances (category approach) Read-across based on grouping of substances (category approach), Key study

##### Aquatic Invertebrates

**Product:** No data available.

**Toxicity to Aquatic Plants****Product:** No data available.**Persistence and Degradability****Biodegradation****Product:** No data available.**BOD/COD Ratio****Product:** No data available.**Bioaccumulative potential****Bioconcentration Factor (BCF)****Product:** No data available.**Partition Coefficient n-octanol / water (log Kow)****Product:** No data available.**Mobility in soil:** No data available.**Other adverse effects:** No data available.**13. Disposal considerations****Disposal methods:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.**Contaminated Packaging:** No data available.**14. Transport information****TDG:**

Not Regulated

**CFR / DOT:**

Not Regulated

**IMDG:**

Not Regulated

**15. Regulatory information****US Federal Regulations****TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

**US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended**

<u>Chemical Identity</u>	<u>OSHA hazard(s)</u>
Crystalline Silica (Quartz)/ Silica Sand	kidney effects lung effects immune system effects Cancer

**CERCLA Hazardous Substance List (40 CFR 302.4):**

None present or none present in regulated quantities.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Hazard categories**

Immediate (Acute) Health Hazards  
Delayed (Chronic) Health Hazard  
Acute toxicity (any route or exposure)  
Skin Corrosion or Irritation  
Serious eye damage or eye irritation  
Respiratory or Skin Sensitization  
Carcinogenicity  
Specific target organ toxicity (single or repeated exposure)

**US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances**

Not regulated.

**US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting**

<u>Chemical Identity</u>	<u>% by weight</u>
Calcium nitrate	1.0%

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**US State Regulations****US. California Proposition 65**



**WARNING**  
Cancer - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**International regulations**

**Montreal protocol**

Not applicable

**Stockholm convention**

Not applicable

**Rotterdam convention**

Not applicable

**Kyoto protocol**

Not applicable

**VOC:**

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

VOC Method 310 : 0.00 %

**Inventory Status:**

Australia AICS:	All components in this product are listed on or exempt from the Inventory.
Canada DSL Inventory List:	All components in this product are listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	All components in this product are listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	One or more components in this product are not listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	One or more components in this product are not listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	All components in this product are listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Mexico INSQ:	One or more components in this



product are not listed on or exempt from the Inventory.

Ontario Inventory:

One or more components in this product are not listed on or exempt from the Inventory.

Taiwan Chemical Substance Inventory:

One or more components in this product are not listed on or exempt from the Inventory.

**16. Other information, including date of preparation or last revision**

**Revision Date:** 11/17/2022

**Version #:** 3.1

**Further Information:** No data available.

**Disclaimer:** 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.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** VERTICOAT LIQUID  
**Product Code:** 046B 96

**Recommended use and restriction on use**

**Recommended use:** Coatings  
**Restrictions on use:** Not known.

**Manufacturer/Importer/Supplier/Distributor Information**

EUCLID CHEMICAL COMPANY  
19218 REDWOOD ROAD  
CLEVELAND OH 44110  
US

**Contact person:** EH&S Department  
**Telephone:** 216-531-9222  
**Emergency telephone number:** 1-800-424-9300 (US); 1-613-996-6666 (Canada)

## 2. Hazard(s) identification

**Hazard Classification** Not classified

### Label Elements

**Hazard Symbol:** No symbol  
**Signal Word:** No signal word.  
**Hazard Statement:** Not applicable  
**Precautionary Statements** Not applicable

**Hazard(s) not otherwise classified (HNOC):** None.

## 3. Composition/information on ingredients

### Mixtures

**Composition Comments:** The components are not hazardous or are below required disclosure limits.



#### 4. First-aid measures

##### Description of necessary first-aid measures

<b>Inhalation:</b>	Move to fresh air.
<b>Skin Contact:</b>	Remove contaminated clothing and wash the skin thoroughly with soap and water after work.
<b>Eye contact:</b>	Rinse immediately with plenty of water.
<b>Ingestion:</b>	Rinse mouth thoroughly.
<b>Personal Protection for First-aid Responders:</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

##### Most important symptoms/effects, acute and delayed

<b>Symptoms:</b>	May cause skin and eye irritation.
<b>Hazards:</b>	No data available.

##### Indication of immediate medical attention and special treatment needed

<b>Treatment:</b>	Get medical attention if symptoms occur.
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#### 5. Fire-fighting measures

<b>General Fire Hazards:</b>	No unusual fire or explosion hazards noted.
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##### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

<b>Specific hazards arising from the chemical:</b>	During fire, gases hazardous to health may be formed.
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##### Special protective equipment and precautions for fire-fighters

**Special fire-fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

#### 6. Accidental release measures



<b>Personal precautions, protective equipment and emergency procedures:</b>	No data available.
<b>Accidental release measures:</b>	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.
<b>Methods and material for containment and cleaning up:</b>	Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.
<b>Environmental Precautions:</b>	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

## 7. Handling and storage

### Handling

<b>Technical measures (e.g. Local and general ventilation):</b>	Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.
<b>Safe handling advice:</b>	Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
<b>Contact avoidance measures:</b>	No data available.
<b>Hygiene measures:</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

### Storage

<b>Safe storage conditions:</b>	Store away from incompatible materials. Store in original tightly closed container.
<b>Safe packaging materials:</b>	No data available.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

None of the components have assigned exposure limits.

#### Appropriate Engineering Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

### Individual protection measures, such as personal protective equipment

<b>Eye/face protection:</b>	Wear goggles/face shield.
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**Skin Protection****Hand Protection:** Additional Information: Use suitable protective gloves if risk of skin contact.**Skin and Body Protection:** No data available.**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.**Hygiene measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.**9. Physical and chemical properties****Appearance****Physical state:** liquid**Form:** liquid**Color:** White**Odor:** Mild**Odor threshold:** No data available.**pH:** 8.8**Melting point/freezing point:** No data available.**Initial boiling point and boiling range:** 100 °C 212 °F**Flash Point:** No data available.**Evaporation rate:** Slower than Ether**Flammability (solid, gas):** No**Upper/lower limit on flammability or explosive limits****Flammability limit - upper (%):** No data available.**Flammability limit - lower (%):** No data available.**Explosive limit - upper:** No data available.**Explosive limit - lower:** No data available.**Vapor pressure:** No data available.**Vapor density:** Vapors are heavier than air and may travel along the floor and in the bottom of containers.**Relative density:** 1.02**Solubility(ies)****Solubility in water:** Soluble**Solubility (other):** No data available.**Partition coefficient (n-octanol/water):** No data available.**Auto-ignition temperature:** No data available.**Decomposition temperature:** No data available.**Viscosity:** No data available.

**10. Stability and reactivity**

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	Avoid heat or contamination.
<b>Incompatible Materials:</b>	Strong acids. Strong bases.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

**11. Toxicological information****Information on likely routes of exposure**

<b>Inhalation:</b>	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
<b>Skin Contact:</b>	Moderately irritating to skin with prolonged exposure.
<b>Eye contact:</b>	Eye contact is possible and should be avoided.
<b>Ingestion:</b>	May be ingested by accident. Ingestion may cause irritation and malaise.

**Symptoms related to the physical, chemical and toxicological characteristics**

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)**

<b>Oral Product:</b>	Not classified for acute toxicity based on available data.
<b>Dermal Product:</b>	Not classified for acute toxicity based on available data.
<b>Inhalation Product:</b>	

<b>Repeated dose toxicity Product:</b>	No data available.
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**Skin Corrosion/Irritation****Product:** No data available.**Serious Eye Damage/Eye Irritation****Product:** No data available.**Respiratory or Skin Sensitization****Product:** No data available.**Carcinogenicity****Product:** No data available.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:**

No carcinogenic components identified

**Germ Cell Mutagenicity****In vitro****Product:** No data available.**In vivo****Product:** No data available.**Reproductive toxicity****Product:** No data available.**Specific Target Organ Toxicity - Single Exposure****Product:** No data available.**Specific Target Organ Toxicity - Repeated Exposure****Product:** No data available.**Aspiration Hazard****Product:** No data available.**Other effects:**

No data available.

**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:**

000000004232



**Fish**  
**Product:** No data available.

**Aquatic Invertebrates**  
**Product:** No data available.

**Chronic hazards to the aquatic environment:**

**Fish**  
**Product:** No data available.

**Aquatic Invertebrates**  
**Product:** No data available.

**Toxicity to Aquatic Plants**  
**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**  
**Product:** No data available.

**BOD/COD Ratio**  
**Product:** No data available.

**Bioaccumulative potential**  
**Bioconcentration Factor (BCF)**  
**Product:** No data available.

**Partition Coefficient n-octanol / water (log Kow)**  
**Product:** No data available.

**Mobility in soil:** No data available.

**Other adverse effects:** No data available.

**13. Disposal considerations**

**Disposal methods:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated Packaging:** No data available.

**14. Transport information**

**TDG:**

Not Regulated



**CFR / DOT:**

Not Regulated

**IMDG:**

Not Regulated

**15. Regulatory information**

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

**US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended**

**Chemical Identity**

Formaldehyde

**OSHA hazard(s)**

Skin irritation  
Flammability  
respiratory tract irritation  
Cancer  
Acute toxicity  
Skin sensitization  
Respiratory sensitization  
Eye irritation

**CERCLA Hazardous Substance List (40 CFR 302.4):**

**Chemical Identity**

Ammonium hydroxide  
Formaldehyde

**Reportable quantity**

1000 lbs.  
100 lbs.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Not listed.

**US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances**

**US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting**

**Chemical Identity**

**% by weight**

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

**Chemical Identity**

Formaldehyde

**Reportable quantity**

lbs



**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**US State Regulations**

**US. California Proposition 65**

For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**International regulations**

**Montreal protocol**

Not applicable

**Stockholm convention**

Not applicable

**Rotterdam convention**

Not applicable

**Kyoto protocol**

Not applicable

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

Regulatory VOC (less water and exempt solvent) : 27 g/l

VOC Method 310 : 0.00 %

**Inventory Status:**

Australia AICS:	One or more components in this product are not listed on or exempt from the Inventory.
Canada DSL Inventory List:	All components in this product are listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	One or more components in this product are not listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	One or more components in this product are not listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	One or more components in this product are not listed on or exempt from the Inventory.
US TSCA Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	One or more components in this product are not listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.



**16. Other information, including date of preparation or last revision**

**Revision Date:** 11/17/2022

**Version #:** 3.1

**Further Information:** No data available.

**Disclaimer:** 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.