



EUCLID CHEMICAL

Version: 1.0  
Revision Date: 03/04/2018

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This is a kit that contains the following components:

DURAL ICC GEL PART A

DURAL ICC GEL PART B



EUCLID CHEMICAL

Version: 1.0  
Revision Date: 03/04/2018

# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** DURAL ICC GEL PART A  
**Product Code:** 002ICC 95

### Recommended use and restriction on use

**Recommended use:** Not available.  
**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

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 1
Skin sensitizer	Category 1
Specific Target Organ Toxicity - Single Exposure	Category 3 <sup>1</sup>

#### Target Organs

1. Respiratory tract irritation.

#### Unknown toxicity - Health

Acute toxicity, oral	65 %
Acute toxicity, dermal	65 %
Acute toxicity, inhalation, vapor	75 %
Acute toxicity, inhalation, dust or mist	75 %

#### Unknown toxicity - Environment

Acute hazards to the aquatic environment	75 %
Chronic hazards to the aquatic environment	75 %

### Label Elements

**Hazard Symbol:**



**Signal Word:** Danger

**Hazard Statement:** Causes skin irritation.  
Causes serious eye damage.  
May cause an allergic skin reaction.  
May cause respiratory irritation.

**Precautionary Statements**

**Prevention:** Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapours/spray. Contaminated work clothing should not be allowed out of the workplace. Use only outdoors or in a well-ventilated area.

**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 water/... If skin irritation or rash occurs: Get medical advice/attention. Immediately call a POISON CENTER/doctor. Specific treatment (see on this label). Wash contaminated clothing before reuse.

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

**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 (%)*
Portland cement	65997-15-1	50 - <100%
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	20 - <50%
2-Propenoic acid, 2-methyl-, monoester with 1,2- propanediol	27813-02-1	10 - <20%

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

#### 4. First-aid measures

<b>Ingestion:</b>	Call a POISON CENTRE/doctor if you feel unwell. Rinse mouth.
<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.

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

<b>Symptoms:</b>	No data available.
<b>Hazards:</b>	No data available.

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

<b>Treatment:</b>	No data available.
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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. Water spray, fog, CO2, dry chemical, or regular foam.
<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.

#### Special protective equipment and precautions for firefighters

<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>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>Notification Procedures:</b>	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable 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

<b>Precautions for safe handling:</b>	Do not get in eyes. Wash hands thoroughly after handling. Avoid contact with skin. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities:</b>	Store away from incompatible materials. Store in original tightly closed container.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

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



Chemical name	Type	Exposure Limit Values	Source
Portland cement - Total dust.	TWA	10 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Portland cement - Respirable fraction.	TWA	3 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Portland cement - Respirable fraction.	TWA	1 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Portland cement - Total dust.	TWA	10 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Portland cement - Respirable dust.	TWA	5 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.025 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
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) (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 the Quality of the Work Environment) (12 2008)

**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****General information:**

Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Eye/face protection:**

Wear safety glasses with side shields (or goggles).

**Skin Protection****Hand Protection:**

Nitrile butyl rubber (NBR). Use suitable protective gloves if risk of skin contact.

**Other:**

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

## 9. Physical and chemical properties

### Appearance

**Physical state:** liquid  
**Form:** Paste  
**Color:** Gray

**Odor:** Characteristic  
**Odor threshold:** No data available.  
**pH:** No data available.  
**Melting point/freezing point:** No data available.  
**Initial boiling point and boiling range:** No data available.  
**Flash Point:** > 100 °C > 212 °F  
**Evaporation rate:** No data available.  
**Flammability (solid, gas):** No data available.

### 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:** No data available.  
**Relative density:** 1.7 - 1.8

### Solubility(ies)

**Solubility in water:** No data available.  
**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

**Reactivity:** No data available.

**Chemical Stability:** Material is stable under normal conditions.

**Possibility of hazardous reactions:** No data available.

**Conditions to avoid:** Heat, sparks, flames.



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<b>Incompatible Materials:</b>	Metal Powder Strong oxidizing agents. Avoid contact with acids and alkalies.
<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>	Causes skin irritation. May cause an allergic skin reaction.
<b>Eye contact:</b>	Causes serious eye damage.
<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</b>	
<b>Product:</b>	ATEmix: 7,000 mg/kg
<b>Dermal</b>	
<b>Product:</b>	Not classified for acute toxicity based on available data.
<b>Specified substance(s):</b>	
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	LD 50 (Rabbit): > 5,000 mg/kg
<b>Inhalation</b>	
<b>Product:</b>	Not classified for acute toxicity based on available data.

<b>Repeated dose toxicity</b>	
<b>Product:</b>	No data available.

### Skin Corrosion/Irritation



**Product:** No data available.

**Specified substance(s):**

2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol in vivo (Rabbit): Not irritant Experimental result, Key study

**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:**

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

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

**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.

**Aspiration Hazard**

**Product:** No data available.

**Other effects:** No data available.

**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****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 K<sub>ow</sub>)****Product:** No data available.**Mobility in soil:** No data available.**Other adverse effects:** No data available.

### 13. Disposal considerations

**Disposal instructions:** 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. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

<u>Chemical Identity</u>	<u>OSHA hazard(s)</u>
Crystalline Silica	kidney effects
(Quartz)/ Silica Sand	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  
Skin Corrosion or Irritation  
Serious eye damage or eye irritation  
Respiratory or Skin Sensitization  
Specific target organ toxicity (single or repeated exposure)

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

None present or none present in regulated quantities.

**SARA 311/312 Hazardous Chemical**

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Portland cement	10000 lbs
Crystalline Silica (Quartz)/ Silica Sand	10000 lbs
2-Propenoic acid, 2- methyl-, monoester with 1,2-propanediol	10000 lbs

**SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

**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**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Crystalline Silica (Quartz)/ Silica Sand      Carcinogenic. 09 2011

**US. New Jersey Worker and Community Right-to-Know Act**Chemical IdentityPortland cement  
Crystalline Silica (Quartz)/ Silica Sand**US. Massachusetts RTK - Substance List**Chemical IdentityPortland cement  
Crystalline Silica (Quartz)/ Silica Sand**US. Pennsylvania RTK - Hazardous Substances**Chemical IdentityPortland cement  
Crystalline Silica (Quartz)/ Silica Sand**US. Rhode Island RTK**Chemical Identity

Portland cement

**International regulations**



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**Montreal protocol**

not applicable

**Stockholm convention**

not applicable

**Rotterdam convention**

not applicable

**Kyoto protocol**

not applicable

**VOC:**

Regulatory VOC (less water and  
exempt solvent) : < 5 g/l

VOC Method 310 : < 0.10 %

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**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:	All components in this product are 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):	All components in this product are 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.



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**Version #:** 1.0

**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.



EUCLID CHEMICAL

Version: 1.0  
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# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** DURAL ICC GEL PART B  
**Product Code:** 002ICC 95

### Recommended use and restriction on use

**Recommended use:** Adhesive  
**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

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Skin sensitizer	Category 1

#### Unknown toxicity - Health

Acute toxicity, oral	0 %
Acute toxicity, dermal	10 %
Acute toxicity, inhalation, vapor	20 %
Acute toxicity, inhalation, dust or mist	10 %

### Environmental Hazards

Acute hazards to the aquatic environment	Category 1
Chronic hazards to the aquatic environment	Category 2

#### Unknown toxicity - Environment

Acute hazards to the aquatic environment	0 %
Chronic hazards to the aquatic environment	10 %

### Environmental Hazards

Acute hazards to the aquatic environment	Category 1
Chronic hazards to the aquatic environment	Category 2

Acute hazards to the aquatic environment	0 %
Chronic hazards to the aquatic environment	10 %

### Label Elements

#### Hazard Symbol:



**Signal Word:** Warning

**Hazard Statement:** Causes skin irritation.  
Causes serious eye irritation.  
May cause an allergic skin reaction.  
Very toxic to aquatic life.  
Toxic to aquatic life with long lasting effects.

#### Precautionary Statements

**Prevention:** Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapours/spray. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment.

**Response:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water/... If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see on this label). Wash contaminated clothing before reuse. Collect spillage.

**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%
Dibenzoyl Peroxide	94-36-0	10 - <20%
Ethylene glycol	107-21-1	10 - <20%

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

## 4. First-aid measures

<b>Ingestion:</b>	Call a POISON CENTRE/doctor if you feel unwell. Rinse mouth.
<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. Get medical attention.

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

<b>Symptoms:</b>	No data available.
<b>Hazards:</b>	No data available.

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

<b>Treatment:</b>	No data available.
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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. Water spray, foam, dry powder or carbon dioxide.
<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 firefighters

<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>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>Notification Procedures:</b>	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable 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.

## 7. Handling and storage

<b>Precautions for safe handling:</b>	Avoid contact with eyes. Wash hands thoroughly after handling. Avoid contact with skin. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities:</b>	Store away from incompatible materials. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.025 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (2011)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	TWA	0.05 mg/m <sup>3</sup>	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (03 2016)
	OSHA_ACT	0.025 mg/m <sup>3</sup>	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (03 2016)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	PEL	0.05 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (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) (2000)
	TWA	0.1 mg/m <sup>3</sup>	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Dibenzoyl Peroxide	TWA	5 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (2011)
	PEL	5 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air



Ethylene glycol - Aerosol, inhalable.	STEL	10 mg/m <sup>3</sup>	Contaminants (29 CFR 1910.1000) (02 2006) US. ACGIH Threshold Limit Values (03 2017)
Ethylene glycol - Vapor fraction	TWA	25 ppm	US. ACGIH Threshold Limit Values (03 2017)
	STEL	50 ppm	US. ACGIH Threshold Limit Values (03 2017)

Chemical name	Type	Exposure Limit Values	Source
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.025 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
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) (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 the Quality of the Work Environment) (12 2008)
Dibenzoyl Peroxide	TWA	5 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Dibenzoyl Peroxide	TWA	5 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Dibenzoyl Peroxide	TWA	5 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Ethylene glycol - Vapor.	CEILING	50 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Ethylene glycol - Aerosol.	CEILING	100 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Ethylene glycol - Particulate.	TWA	10 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	20 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Ethylene glycol - Aerosol.	CEV	100 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Ethylene glycol - Vapor and mist	CEILING	50 ppm 127 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

**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>General information:</b>	Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
<b>Eye/face protection:</b>	Wear safety glasses with side shields (or goggles).
<b>Skin Protection</b>	
<b>Hand Protection:</b>	Nitrile butyl rubber (NBR). Use suitable protective gloves if risk of skin contact.
<b>Other:</b>	Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.
<b>Respiratory Protection:</b>	In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
<b>Hygiene measures:</b>	Avoid contact with eyes. Observe good industrial hygiene practices. Wash contaminated clothing before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	Paste
<b>Color:</b>	Black
<b>Odor:</b>	Characteristic
<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>	> 100 °C > 212 °F
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Upper/lower limit on flammability or explosive limits</b>	
<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>	1.7 - 1.8

**Solubility(ies)****Solubility in water:** No data available.**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****Reactivity:** No data available.**Chemical Stability:** Material is stable under normal conditions.**Possibility of hazardous reactions:** No data available.**Conditions to avoid:** Avoid heat or contamination.**Incompatible Materials:** No data available.**Hazardous Decomposition Products:** Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.**11. Toxicological information****Information on likely routes of exposure****Inhalation:** In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.**Skin Contact:** Causes skin irritation. May cause an allergic skin reaction.**Eye contact:** Causes serious eye irritation.**Ingestion:** May be ingested by accident. Ingestion may cause irritation and malaise.**Symptoms related to the physical, chemical and toxicological characteristics****Inhalation:** No data available.**Skin Contact:** 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:** Not classified for acute toxicity based on available data.



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<b>Specified substance(s):</b>	
Dibenzoyl Peroxide	LD 50 (Rat): > 5,000 mg/kg
Ethylene glycol	LD 50 (Rat): 7,712 mg/kg
<b>Dermal</b>	
<b>Product:</b>	Not classified for acute toxicity based on available data.
<b>Specified substance(s):</b>	
Ethylene glycol	LD 50 (Rabbit): 9,530 mg/kg
<b>Inhalation</b>	
<b>Product:</b>	Not classified for acute toxicity based on available data.
<b>Specified substance(s):</b>	
Dibenzoyl Peroxide	LC 50: 24.3 mg/l
<b>Repeated dose toxicity</b>	
<b>Product:</b>	No data available.
<b>Skin Corrosion/Irritation</b>	
<b>Product:</b>	No data available.
<b>Specified substance(s):</b>	
Dibenzoyl Peroxide	Irritating in vivo (Rabbit): Not irritant Experimental result, Key study
Ethylene glycol	in vivo (Rabbit): Not irritant Experimental result, Key study
<b>Serious Eye Damage/Eye Irritation</b>	
<b>Product:</b>	No data available.
<b>Specified substance(s):</b>	
Dibenzoyl Peroxide	Rabbit, 1 - 48 hrs: Irritating
Ethylene glycol	Rabbit, 24 hrs: Not irritating
<b>Respiratory or Skin Sensitization</b>	
<b>Product:</b>	No data available.
<b>Carcinogenicity</b>	
<b>Product:</b>	No data available.

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

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

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

**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.

<b>12. Ecological information</b>
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**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

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

**Specified substance(s):**

Dibenzoyl Peroxide      EC 50 (Rainbow Trout, 96 h): 0.0602 mg/l  
NOAEL (Rainbow Trout, 96 h): 0.0316 mg/l

Ethylene glycol      LC 50 (Rainbow trout, donaldson trout (*Oncorhynchus mykiss*), 96 h): 36,000  
- 47,000 mg/l Mortality

**Aquatic Invertebrates****Product:** No data available.**Specified substance(s):**Dibenzoyl Peroxide EC 50 (Water Flea, 48 h): 0.11 mg/l  
NOAEL (Water Flea, 48 h): 0.077 mg/lEthylene glycol LC 50 (Water flea (Ceriodaphnia dubia), 48 h): 11,700 - 16,600 mg/l  
Mortality**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Specified substance(s):**Ethylene glycol NOAEL (Pimephales promelas, 7 d): 15,380 mg/l Experimental result,  
Weight of Evidence study**Aquatic Invertebrates****Product:** No data available.**Toxicity to Aquatic Plants****Product:** No data available.**Specified substance(s):**Dibenzoyl Peroxide EC 50 (Algae (Pseudokirchneriella subcapitata), 72 h): 0.0711 mg/l  
NOEC (Algae (Pseudokirchneriella subcapitata), 72 h): 0.02 mg/l**Persistence and Degradability****Biodegradation****Product:** No data available.**BOD/COD Ratio****Product:** No data available.**Bioaccumulative potential****Bioconcentration Factor (BCF)****Product:** No data available.**Specified substance(s):**

Ethylene glycol Crayfish (Procambarus), Bioconcentration Factor (BCF): 0.42 (Flow through)

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

Dibenzoyl Peroxide Log Kow: 3.46

Ethylene glycol

Log Kow: -1.36

**Mobility in soil:**

No data available.

**Other adverse effects:**

Very toxic to aquatic organisms. Toxic to aquatic life with long lasting effects.

### 13. Disposal considerations

**Disposal instructions:**

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:**

UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dibenzoyl peroxide, <=62%), 9, PG III

**CFR / DOT:**

UN3077, Environmentally hazardous substance, solid, n.o.s. (Dibenzoyl peroxide, <=62%), 9, PG III

**IMDG:**

UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dibenzoyl peroxide, <=62%), 9, PG III

**Further Information:**

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

### 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. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

**Chemical Identity**

Crystalline Silica  
(Quartz)/ Silica Sand

**OSHA hazard(s)**

kidney effects  
lung effects  
immune system effects  
Cancer

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

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Ethylene glycol	5000 lbs.

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

Immediate (Acute) Health Hazards  
Skin Corrosion or Irritation  
Serious eye damage or eye irritation  
Respiratory or Skin Sensitization

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Ethylene glycol	5000 lbs.

**SARA 311/312 Hazardous Chemical**

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Crystalline Silica (Quartz)/ Silica Sand	10000 lbs
Dibenzoyl Peroxide	10000 lbs
Ethylene glycol	10000 lbs

**SARA 313 (TRI Reporting)**

<u>Chemical Identity</u>
Dibenzoyl Peroxide
Ethylene glycol

**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**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Crystalline Silica (Quartz)/ Silica Sand	Carcinogenic. 09 2011
Ethylene glycol	Developmental toxin. 06 2015

**US. New Jersey Worker and Community Right-to-Know Act**

<u>Chemical Identity</u>
Crystalline Silica (Quartz)/ Silica Sand
Dibenzoyl Peroxide
Ethylene glycol



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**US. Massachusetts RTK - Substance List**

**Chemical Identity**

Crystalline Silica (Quartz)/ Silica Sand  
Dibenzoyl Peroxide  
Ethylene glycol

**US. Pennsylvania RTK - Hazardous Substances**

**Chemical Identity**

Crystalline Silica (Quartz)/ Silica Sand  
Dibenzoyl Peroxide  
Ethylene glycol

**US. Rhode Island RTK**

**Chemical Identity**

Dibenzoyl Peroxide  
Ethylene glycol

**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) : 170 g/l  
VOC Method 310 : 10.00 %

**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:	All components in this product are listed on or exempt from the Inventory.
Japan (ENCS) List:	All components in this product are 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):	All components in this product are 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:	All components in this product are 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:	All components in this product are 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.



EUCLID CHEMICAL

Version: 1.0  
Revision Date: 03/04/2018

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**Revision Date:** 03/04/2018

**Version #:** 1.0

**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.