

Revision Date: 03/04/2018

This is a kit that contains the following components:

DURAL ICC GEL PART A

DURAL ICC GEL PART B



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 Admixture Canada Inc.

2835 Grand-Allee

Saint Hubert QC J4T 2R4

CA

Contact person: EH&S Department **Telephone:** (450)465-2233

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 - Category 3

Category 3

Single Exposure

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 75 %
or mist

Unknown toxicity - Environment

Acute hazards to the aquatic 75 %

environment

Chronic hazards to the aquatic 75 %

environment

Label Elements



Revision Date: 03/04/2018

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%



Revision Date: 03/04/2018

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

4. First-aid measures

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

Inhalation: Move to fresh air.

Skin Contact: 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.

Eye contact: 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

Symptoms: No data available.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: No data available.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials. Water

spray, fog, CO2, dry chemical, or regular foam.

Unsuitable extinguishing

media:

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

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



Revision Date: 03/04/2018

Personal precautions, protective equipment and emergency procedures: 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.

Methods and material for containment and cleaning

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.

Notification Procedures:

In the event of a spill or accidental release, notify relevant authorities in

accordance with all applicable regulations.

Environmental Precautions:

Do not contaminate water sources or sewer. Prevent further leakage or

spillage if safe to do so.

7. Handling and storage

Precautions for safe handling:

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.

Conditions for safe storage, including any incompatibilities:

Store away from incompatible materials. Store in original tightly closed

container.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Туре	Exposure Limit Values	Source
Portland cement - Respirable fraction.	TWA	1 mg/m3	US. ACGIH Threshold Limit Values (2011)
Portland cement - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Portland cement - Respirable fraction.	PEL	5 mg/m3	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/m3	US. ACGIH Threshold Limit Values (2011)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	TWA	0.05 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (03 2016)
	OSHA_AC T	0.025 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (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) (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/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)



Revision Date: 03/04/2018

Chemical name	Туре	Exposure Limit Values	Source
Portland cement - Total dust.	TWA	10 mg/m3	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/m3	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/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Portland cement - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Portland cement - Respirable dust.	TWA	5 mg/m3	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/m3	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/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	TWA	0.1 mg/m3	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.



Revision Date: 03/04/2018

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:liquidForm:PasteColor: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 (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%):

No data available.

No data available.

Vapor pressure:

Vapor density:

No data available.

No data available.

Relative density: 1.7 - 1.8

Solubility(ies)

Solubility in water:
Solubility (other):
No data available.
Partition coefficient (n-octanol/water):
No data available.
No data available.
No data available.
Pecomposition 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.



Revision Date: 03/04/2018

Incompatible Materials: Metal Powder Strong oxidizing agents. Avoid contact with acids and

alkalies.

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 damage.

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: ATEmix: 7,000 mg/kg

Dermal

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

Specified substance(s):

2-Propenoic acid, 2-methyl-, monoester with

1,2-propanediol

LD 50 (Rabbit): > 5,000 mg/kg

Inhalation

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

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation



Revision Date: 03/04/2018

Product: No data available.

Specified substance(s):

2-Propenoic acid, 2-methyl-, monoester with

in vivo (Rabbit): Not irritant Experimental result, Key study

Serious Eye Damage/Eye Irritation

1,2-propanediol

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.



Revision Date: 03/04/2018

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 Kow)

Product: No data available.

Mobility in soil: No data available.

Other adverse effects: No data available.



Revision Date: 03/04/2018

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)

Chemical IdentityOSHA hazard(s)Crystalline Silicakidney effects(Quartz)/ Silica Sandlung 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)



Revision Date: 03/04/2018

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)/ 10000 lbs

Silica Sand

2-Propenoic acid, 2- 10000 lbs

methyl-, monoester with

1,2-propanediol

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)/ Carcinogenic. 09 2011

Silica Sand

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

Chemical Identity

Portland cement

Crystalline Silica (Quartz)/ Silica Sand

US. Massachusetts RTK - Substance List

Chemical Identity

Portland cement

Crystalline Silica (Quartz)/ Silica Sand

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Portland cement

Crystalline Silica (Quartz)/ Silica Sand

US. Rhode Island RTK

Chemical Identity

Portland cement

International regulations



Revision Date: 03/04/2018

Montreal protocol

not applicable

Stockholm convention

not applicable

Rotterdam convention

not applicable

Kyoto protocol not applicable

VOC:

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

exempt solvent)

VOC Method 310 : < 0.10 %



Revision Date: 03/04/2018

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.

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



Revision Date: 03/04/2018

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.



Revision Date: 03/04/2018

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 Admixture Canada Inc.

2835 Grand-Allee

Saint Hubert QC J4T 2R4

CA

Contact person: EH&S Department Telephone: (450)465-2233

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

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

Environmental Hazards

Acute hazards to the aquatic Category 1

environment

Category 2 Chronic hazards to the aquatic

environment

Unknown toxicity - Environment

Acute hazards to the aquatic 0 %

environment

Chronic hazards to the aquatic 10 %

environment



Revision Date: 03/04/2018

Environmental Hazards

Acute hazards to the aquatic

Category 1

environment

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



Revision Date: 03/04/2018

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

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

Inhalation: Move to fresh air.

Skin Contact: 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.

Eye contact: 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

Symptoms: No data available.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: No data available.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials. Water

spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing

media:

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters



Revision Date: 03/04/2018

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

Personal precautions, protective equipment and emergency procedures:

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.

Methods and material for containment and cleaning

up:

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.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in

accordance with all applicable regulations.

Environmental Precautions: 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

Precautions for safe handling:

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.

Conditions for safe storage, including any incompatibilities:

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	Туре	Exposure Limit Values	Source
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.025 mg/m3	US. ACGIH Threshold Limit Values (2011)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	TWA	0.05 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (03 2016)
	OSHA_AC T	0.025 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (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) (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/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Dibenzoyl Peroxide	TWA PEL	5 mg/m3 5 mg/m3	US. ACGIH Threshold Limit Values (2011) US. OSHA Table Z-1 Limits for Air



Revision Date: 03/04/2018

			Contaminants (29 CFR 1910.1000) (02 2006)
Ethylene glycol - Aerosol, inhalable.	STEL	10 mg/m3	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	Туре	Exposure Limit Values	Source
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.025 mg/m	3 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	3 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	3 Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Dibenzoyl Peroxide	TWA	5 mg/m	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	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Dibenzoyl Peroxide	TWA	5 mg/m	3 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	3 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	3 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	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	3 Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Ethylene glycol - Vapor and mist	CEILING	50 ppm 127 mg/m	

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.



Revision Date: 03/04/2018

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: 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

Physical state:liquidForm:PasteColor:Black

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. No data available. Flammability (solid, gas):

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%):

No data available.

No data available.

Vapor pressure:

No data available.

No data available.

No data available.

Relative density: 1.7 - 1.8



Revision Date: 03/04/2018

Solubility(ies)

Solubility in water:
Solubility (other):
No data available.
Partition coefficient (n-octanol/water):
No data available.
No data available.
No data available.
Pecomposition 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.



Revision Date: 03/04/2018

Specified substance(s):

Dibenzoyl Peroxide LD 50 (Rat): > 5,000 mg/kg

Ethylene glycol LD 50 (Rat): 7,712 mg/kg

Dermal

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

Specified substance(s):

Ethylene glycol LD 50 (Rabbit): 9,530 mg/kg

Inhalation

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

Specified substance(s):

Dibenzoyl Peroxide LC 50: 24.3 mg/l

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Dibenzoyl Peroxide Irritating

in vivo (Rabbit): Not irritant Experimental result, Key study

Ethylene glycol in vivo (Rabbit): Not irritant Experimental result, Key study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Dibenzoyl Peroxide Rabbit, 1 - 48 hrs: Irritating

Ethylene glycol Rabbit, 24 hrs: Not irritating

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.



Revision Date: 03/04/2018

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.

12. Ecological information

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

24/30



Revision Date: 03/04/2018

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/l

Ethylene 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



Revision Date: 03/04/2018

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 IdentityOSHA hazard(s)Crystalline Silicakidney effects(Quartz)/ Silica Sandlung effects

immune system effects

Cancer



Revision Date: 03/04/2018

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)/ 10000 lbs

Silica Sand

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)/ Carcinogenic. 09 2011

Silica Sand

Ethylene glycol Developmental toxin. 06 2015

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

Chemical Identity

Crystalline Silica (Quartz)/ Silica Sand Dibenzoyl Peroxide

Ethylene glycol



Revision Date: 03/04/2018

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 : 170 g/l

exempt solvent)

VOC Method 310 : 10.00 %



Revision Date: 03/04/2018

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.

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



Revision Date: 03/04/2018

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.