



Material Safety Data Sheet

PRO-DRB-LT

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FLAMMABILITY		1
PHYSICAL HAZARD		1
PERSONAL PROTECTION		E

1. Product and Company Identification

Material name	PRO-DRB-LT
Version #	04
Revision date	June-01-2012
CAS #	Mixture
Manufacturer information	Clearwater International LLC. 4420 Flores Rd Elmendorf, TX 78112 United States Chemtrec 1-800-424-9300 Chemtrec INTL +1-703-527-3887
Supplier information	Producers Service Corp. 109 South Graham St. Zanesville, OH 43701 US
Supplier emergency telephone number(s)	24hr customer Service 740-454-6253

2. Hazards Identification

Emergency overview DANGER

Oxidizing material. Explosive when mixed with combustible material. May cause sensitization by inhalation and skin contact. Harmful if swallowed. Causes skin irritation. Causes irritation to eyes and respiratory tract. Cancer hazard. Prolonged exposure may cause chronic effects. Components of the product may be absorbed into the body by inhalation, ingestion and through the skin.

OSHA regulatory status

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

Routes of exposure

Ingestion.

Eyes

Can cause severe eye irritation. Do not get this material in contact with eyes.

Skin

Contact causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident on re-exposure to this material. Do not get this material in contact with skin.

Inhalation

Prolonged inhalation may be harmful. Inhalation of dusts may cause respiratory irritation. May cause sensitization by inhalation. Repeated or prolonged inhalation may cause toxic effects.

Ingestion

Harmful if swallowed. May cause stomach distress, nausea or vomiting. Do not ingest.

Target organs

Eyes. Lungs. Skin. Respiratory system.

**Chronic effects**

Shortness of breath. Conjunctiva. May cause delayed lung damage. This product has the potential for generation of respirable dust during handling and use. Dust may contain respirable crystalline silica. Overexposure to dust may result in pneumoconiosis, a respiratory disease caused by inhalation of mineral dust, which can lead to fibrotic changes to the lung tissue, or silicosis, a respiratory disease caused by inhalation of silica dust, which can lead to inflammation and fibrosis of the lung tissue. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

Signs and symptoms

Discomfort in the chest. Shortness of breath. Corneal damage. Cough. Conjunctivitis.

Potential environmental effects

May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Ammonium Persulfate	7727-54-0	60 - 80
Crystalline Silica in the form of Quartz	14808-60-7	5 - 15

4. First Aid Measures**First aid procedures****Eye contact**

Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

Skin contact

Before washing use a dry brush to remove dust from skin. Remove and isolate contaminated clothing and shoes. For minor skin contact, avoid spreading material on unaffected skin. Get medical attention if irritation develops or persists.

Inhalation

If symptoms develop move victim to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician if symptoms develop or persist.

Ingestion

If swallowed, seek medical advice immediately and show this container or label. Have victim rinse mouth thoroughly with water. Drink 1 or 2 glasses of water. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention immediately.

Notes to physician

In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General advice

If exposed or concerned: get medical attention/advice. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures**Flammable properties**

Containers may explode when heated. Some will react explosively with hydrocarbons (fuels). May explode from heat or contamination. Some may decompose explosively when heated or involved in a fire. Runoff may create fire or explosion hazard. These substances will accelerate burning when involved in a fire. Contact with combustible material may cause fire.



Extinguishing media

Suitable extinguishing media

Water. Water spray.

Do not use carbon dioxide or other gas-filled fire extinguishers, as they will have no effect on decomposing persulfates.

Protection of firefighters

Protective equipment and precautions for firefighters

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Do not move cargo or vehicle if cargo has been exposed to heat. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out.

Specific methods

Use water spray to cool unopened containers. In the event of fire, cool tanks with water spray.

6. Accidental Release Measures

Personal precautions

Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Keep unnecessary personnel away. Isolate spill or leak area immediately for at least 50 to 100 meters (150 to 330 feet) in all directions. Stay upwind. Keep out of low areas.

Environmental precautions

Runoff from fire control or dilution water may cause pollution.

Methods for containment

Stop leak if you can do so without risk. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Should not be released into the environment. Sweep up or gather material and place in appropriate container for disposal. Avoid dust formation. After removal flush contaminated area thoroughly with water.

7. Handling and Storage

Handling

Do not handle or store near an open flame, heat or other sources of ignition. Keep away from clothing and other combustible materials. Do not breathe dust/fume/gas/mist/vapors/spray. Use only with adequate ventilation. Wear personal protective equipment. Wash hands after handling and before eating. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid release to the environment. Wash thoroughly after handling. Avoid prolonged exposure.

Storage

Do not store near combustible materials. Keep tightly closed in a dry, cool and well-ventilated place. Keep this material away from food, drink and animal feed. Keep out of the reach of children. Use care in handling/storage. Store in accordance with local/regional/national/international regulation.



8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Crystalline Silica in the form of Quartz (14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Crystalline Silica in the form of Quartz (14808-60-7)	TWA	0.3 mg/m ³	Total dust.
		0.1 mg/m ³	Respirable.
		2.4 mppcf	Respirable.

Exposure guidelines Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye / face protection Do not get this material in contact with eyes. Wear safety glasses with side shields. Wear chemical goggles.

Skin protection Avoid contact with the skin. Protective gloves. Wear suitable protective clothing. Closed-toe shoes recommended.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General hygiene considerations When using do not eat or drink. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice. Wash hands after handling and before eating.

9. Physical & Chemical Properties

Appearance	Solid granules.
Physical state	Solid.
Form	Solid.
Color	white - Off-white
Odor	Slightly acrid.
Odor threshold	Not available.
pH	4.5 - 5.5
Vapor pressure	0 hPa estimated
Vapor density	Not available.
Boiling point	Not available.
Melting point/Freezing point	Not available.
Solubility (water)	partially soluble
Specific gravity	1.81
Relative density	Not available.
Flash point	201 °F (93.9 °C) estimated
Flammability limits in air, upper, % by volume	Not available.



Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	Not available.
VOC	0 % estimated
Percent volatile	0 % estimated
Other data	
Flammability class	Combustible IIIB estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions. Instability caused by excessive moisture.
Conditions to avoid	Not available.
Incompatible materials	Combustible material. Acids. Alkaline metals.
Hazardous decomposition products	May include oxides of sulphur. Ammonia Sulfuric acid. Phosphine May include oxides of nitrogen.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Product

PRO-DRB-LT (Mixture)

Test Results

Acute Inhalation LC50 Rat: 173 mg/l/4h

Acute Oral LD50 Rat: 586 mg/kg

Components

Ammonium Persulfate (7727-54-0)

Test Results

Acute Inhalation LC50 Rat: 130 mg/l/4h

Acute Oral LD50 Rat: 495 mg/kg

Sensitization

May cause sensitization of susceptible persons by skin contact.

Acute effects

irritation sensitization

Local effects

Contact may irritate or burn eyes.

Chronic effects

Hazardous by OSHA criteria. Prolonged or repeated exposure may cause lung injury. Prolonged exposure may cause chronic effects. In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.



Carcinogenicity Hazardous by OSHA criteria. Cancer hazard.

ACGIH Carcinogens

Crystalline Silica in the form of Quartz (CAS 14808-60-7) A2 Suspected human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline Silica in the form of Quartz (CAS 14808-60-7) 1 Carcinogenic to humans.

Skin corrosion/irritation Irritating to skin.

Neurological effects Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicological data

Product

Test Results

PRO-DRB-LT (Mixture)

EC50 Daphnia: 160 mg/L 48 Hours

LC50 Fish: 137 mg/L 96 Hours

Components

Test Results

Ammonium Persulfate (7727-54-0)

EC50 Daphnia: 120 mg/L 48 Hours

LC50 Fish: 103 mg/L 96 Hours

Ecotoxicity

Components of this product have been identified as having potential environmental concerns.

Persistence and degradability

Not available.

13. Disposal Considerations

Disposal instructions

Do not allow this material to drain into sewers/water supplies. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.20-24). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:

UN number UN1444
Proper shipping name Ammonium persulfate
Hazard class 5.1
Packing group III

Additional information:

Special provisions A1, A29, IB8, IP3, T1, TP33
Packaging exceptions 152
Packaging non bulk 213
Packaging bulk 240
ERG number 140

TDG

Basic shipping requirements:

Proper shipping name AMMONIUM PERSULFATE
Hazard class 5.1



UN number UN1444
Packing group III

IATA

Basic shipping requirements:

Proper shipping name Ammonium persulphate
Hazard class 5.1
UN number 1444
Packing group III
Additional information:
ERG code 5L

IMDG

Basic shipping requirements:

Proper shipping name AMMONIUM PERSULPHATE
Hazard class 5.1
UN number 1444
Packing group III
EmS No. F-A, S-Q



DOT



TDG



IATA



IMDG

15. Regulatory Information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
CERCLA/SARA Hazardous Substances - Not applicable.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2)

Not regulated

DEA Essential Chemical Code Number

Not regulated

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

Not regulated

DEA Exempt Chemical Mixtures Code Number

Not regulated

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance
No

Section 311 hazardous chemical
No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - New Jersey RTK - Substances: Listed substance

Ammonium Persulfate (CAS 7727-54-0) Listed.

Crystalline Silica in the form of Quartz (CAS 14808-60-7) Listed.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

Crystalline Silica in the form of Quartz (CAS 14808-60-7) Listed.

16. Other Information**Recommended restrictions**

Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.



Engineered Chemistry™

HMIS® ratings

Health: 2*
Flammability: 1
Physical hazard: 1
Personal protection: E

NFPA ratings

Health: 2
Flammability: 1
Instability: 1
Special hazards: OX

Issue date

February-29-2008

**This data sheet contains
changes from the previous
version in section(s):**

Product and Company Identification: Alternate Trade Names