## * * * Section 1 - PRODUCT AND COMPANY IDENTIFICATION * * *

## Material Name: ACID GRADE FLUORSPAR

### Manufacturer Information


CMC Cometals EMERGENCY
CONTACT:
2050 Center Avenue, Suite 250
Ft. Lee, NJ 07024
Mfg Contact: CMC Cometals


### Synonyms

## * * * Section 2 - HAZARDS IDENTIFICATION * * *

**EMERGENCY OVERVIEW**

**Color:** off-white or pink
**Physical Form:** powder
**Odor:** odorless
**Health Hazards:** mucous membrane burns, cancer hazard (in humans)

### POTENTIAL HEALTH EFFECTS

**Inhalation**

**Short Term:** irritation, chest pain
**Long Term:** irritation, nausea, vomiting, diarrhea, constipation, loss of appetite, nosebleed, weight loss, loss of voice, chest pain, difficulty breathing, asthma, blood disorders, lung damage, cancer

**Skin**

**Short Term:** irritation
**Long Term:** irritation

**Eye**

**Short Term:** irritation
**Long Term:** irritation, eye damage

**Ingestion**

**Short Term:** burns
**Long Term:** burns

## * * * Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS * * *

| CAS | Component | Percent | Symbol(s) | Risk Phrase(s) |
|---|---|---|---|---|
| 7789-75-5 | CALCIUM FLUORIDE<br>232-188-7 | 97.1 - 97.8 | --- | --- |
| 14808-60-7 | QUARTZ<br>238-878-4 | 0.597 - 1.15 | T | R:49 |
| 13397-26-7 | CALCITE | 0.006 - 0.57 | --- | --- |
| 1344-28-1 | ALUMINUM OXIDE<br>215-691-6 | 0.033 - 0.29 | --- | --- |
| 1309-37-1 | FERRIC OXIDE RED<br>215-168-2 | 0.03 - 0.097 | --- | --- |
| 1314-56-3 | PHOSPHORUS PENTOXIDE<br>215-236-1 | 0.001 - 0.05 | C | R:35 |

| | | | | |
|---|---|---|---|---|
| 7704-34-9 | SULFUR<br>231-722-6 | 0.0 - 0.0022 | Xi | R:38-36-37-38 |

### Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Fluorides, Aluminium compounds, Aluminum insoluble compounds, Aluminium oxides, Aluminum Oxide (135152-65-7), Iron oxides.

## * * * Section 4 - FIRST AID MEASURES * * *

### Inhalation

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

### Skin

Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

### Eyes

Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

### Ingestion

If swallowed, drink plenty of water, do NOT induce vomiting. Get immediate medical attention.

**Note to Physicians**

Avoid gastric lavage or emesis.

## * * * Section 5 - FIRE FIGHTING MEASURES * * *

See Section 9 for Flammability Properties

**NFPA Ratings: Health:** 3 **Fire:** 0 **Reactivity:** 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### Flammable Properties

Negligible fire hazard.

### Extinguishing Media

Use extinguishing agents appropriate for surrounding fire.

### Fire Fighting Measures

Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

## * * * Section 6 - ACCIDENTAL RELEASE MEASURES * * *

### Water Release

Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Keep out of water supplies and sewers.

### Occupational spill/release

Large spills: Collect spilled material in appropriate container for disposal. Avoid generating dust. Clean up residue with a high-efficiency particulate filter vacuum.

## * * * Section 7 - HANDLING AND STORAGE * * *

### Handling Procedures

Use methods to minimize dust.

## Storage Procedures

Store and handle in accordance with all current regulations and standards. See original container for storage recommendations. Keep separated from incompatible substances.

# * * * Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION * * *

## Component Exposure Limits

**CALCIUM FLUORIDE (7789-75-5)**

**ACGIH:** 2.5 mg/m3 TWA (as F)
**OSHA (US):** 2.5 mg/m3 TWA (as F)

**QUARTZ (14808-60-7)**

**ACGIH:** 0.025 mg/m3 TWA (respirable fraction)
**NIOSH:** 0.05 mg/m3 TWA (respirable dust)
50 mg/m3 IDLH (respirable dust)
**OSHA (US):** 30)/(%SiO2 + 2) mg/m3 TWA, total dust); ((250)/(%SiO2 + 5) mppcf TWA, respirable fraction); ((10)/(%SiO2 + 2) mg/m3 TWA, respirable fraction
**Mexico:** 0.1 mg/m3 TWA (respirable fraction)

**ALUMINUM OXIDE (1344-28-1)**

**ACGIH:** 1 mg/m3 TWA (respirable fraction)
**OSHA (US):** 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
**Mexico:** 10 mg/m3 TWA

**FERRIC OXIDE RED (1309-37-1)**

**ACGIH:** 5 mg/m3 TWA (respirable fraction)
**NIOSH:** 5 mg/m3 TWA (as Fe, dust and fume)
2500 mg/m3 IDLH (as Fe, dust and fume)
**OSHA (US):** 10 mg/m3 TWA (fume)
**Mexico:** 5 mg/m3 TWA
10 mg/m3 STEL (as Fe)

**PHOSPHORUS PENTOXIDE (1314-56-3)**

**Europe:** 1 mg/m3 TWA

## Ventilation

Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

## PERSONAL PROTECTIVE EQUIPMENT

## Eyes/Face

Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

## Protective Clothing

Wear appropriate chemical resistant clothing.

## Glove Recommendations

Wear appropriate chemical resistant gloves.

## Respiratory Protection

Under conditions of frequent use or heavy exposure, respiratory protection may be needed.
Respiratory protection is ranked in order from minimum to maximum.
Consider warning properties before use.
Any particulate respirator equipped with an N95, R95, or P95 filter (including N95, R95, and P95 filtering facepieces) except quarter-mask respirators. The following filters may also be used: N99, R99, P99, N100, R100 or P100.

Any air-purifying full-facepiece respirator equipped with an N95, R95, or P95 filter. The following filters may also be used: N99, R99, P99, N100, R100 or P100.
Any powered, air-purifying respirator with a high-efficiency particulate filter.
Any powered, air-purifying respirator with a tight-fitting facepiece and a high-efficiency particulate filter.
Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode.

**For Unknown Concentrations or Immediately Dangerous to Life or Health -**

Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode.
Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.

## * * * Section 9 - PHYSICAL AND CHEMICAL PROPERTIES * * *

| | | | |
|---|---|---|---|
| **Physical State:** | Solid | **Appearance:** | Not available |
| **Color:** | off-white or pink | **Physical Form:** | powder |
| **Odor:** | odorless | **Odor Threshold:** | Not available |
| **Melting Point:** | 1343 °C | **Boiling Point:** | Not applicable |
| **Vapor Pressure:** | none | **Vapor Density (air = 1):** | Not applicable |
| **Density:** | Not available | **Specific Gravity (water = 1):** | 3.18 |
| **Water Solubility:** | 16 ppm | **Coeff. Water/Oil Dist:** | Not available |

## * * * Section 10 - STABILITY AND REACTIVITY * * *

### Chemical Stability

Stable at normal temperatures and pressure.

### Conditions to Avoid

Avoid generating dust.

### Materials to Avoid

acids, bases, halogens, metal salts, metals, oxidizing materials, combustible materials
QUARTZ:
ALKALIES (STRONG): May be attacked.
CHLORINE TRIFLUORIDE: Possible explosion.
HYDROCHLORIC ACID: Exothermic reaction.
HYDROFLUORIC ACID: May be attacked.
MANGANESE TRIFUORIDE: Violent reaction.
METALS: May produce violent explosion.
OXIDIZERS (STRONG): Fire and explosion hazard.
OXYGEN TRIFUORIDE: Possible explosive reaction.
OZONE: Possible explosive reaction in presence of organic materials.
VINYL ACETATE: Vigorous reaction.
XENON HEXAFLUORIDE: Possible detonation.
CALCIUM FLUORIDE:
ACIDS (CONCENTRATED): Reacts vigorously evolving toxic fumes of hydrogen fluoride.

## Decomposition Products

miscellaneous decomposition products

Thermal decomposition products: miscellaneous decomposition products.

## Possibility of Hazardous Reactions

Will not polymerize.

# * * * Section 11 - TOXICOLOGICAL INFORMATION * * *

## Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

**CALCIUM FLUORIDE (7789-75-5)**

Oral LD50 Rat: 4250 mg/kg

**QUARTZ (14808-60-7)**

Oral LD50 Rat: 500 mg/kg

**ALUMINUM OXIDE (1344-28-1)**

Oral LD50 Rat: >5000 mg/kg

**FERRIC OXIDE RED (1309-37-1)**

Oral LD50 Rat: >10000 mg/kg

**PHOSPHORUS PENTOXIDE (1314-56-3)**

Inhalation LC50 Rat: 1.22 mg/L/1H

**SULFUR (7704-34-9)**

Inhalation LC50 Rat: >9.23 mg/L/4H; Oral LD50 Rat: >3000 mg/kg; Dermal LD50 Rabbit: >2000 mg/kg

## RTECS Acute Toxicity (selected)

The components of this material have been reviewed, and RTECS publishes the following endpoints:

**CALCIUM FLUORIDE (7789-75-5)**

**Oral:** 4417 mg/kg oral rat LD50; 4250 mg/kg oral rat LD50

## Acute Toxicity Level

**CALCIUM FLUORIDE (7789-75-5)**

**Moderately Toxic:** ingestion.

**PHOSPHORUS PENTOXIDE (1314-56-3)**

**Highly Toxic:** inhalation.

**SULFUR (7704-34-9)**

**Highly Toxic:** inhalation.

## Component Carcinogenicity

**CALCIUM FLUORIDE (7789-75-5)**

**ACGIH:** A4 - Not Classifiable as a Human Carcinogen

**QUARTZ (14808-60-7)**

**ACGIH:** A2 - Suspected Human Carcinogen
**IARC:** Monograph 68 [1997] (Group 1 (carcinogenic to humans))
**NTP:** Known Human Carcinogen
**DFG:** Category 1 (causes cancer in man, alveola fraction)
**OSHA:** Present (respirable size)

**ALUMINUM OXIDE (1344-28-1)**

**ACGIH:** A4 - Not Classifiable as a Human Carcinogen
**DFG:** Category 2 (considered to be carcinogenic for man, fibre dust)

**FERRIC OXIDE RED (1309-37-1)**

**ACGIH:** A4 - Not Classifiable as a Human Carcinogen
**IARC:** Supplement 7 [1987]; Monograph 1 [1972] (Group 3 (not classifiable))

## RTECS Irritation

The components of this material have been reviewed and RTECS publishes no data as of the date on this document.

## Local Effects

**CALCIUM FLUORIDE (7789-75-5)**

**Corrosive:** ingestion.

**PHOSPHORUS PENTOXIDE (1314-56-3)**

**Corrosive:** inhalation, skin, eye, ingestion.

**SULFUR (7704-34-9)**

**Irritant:** inhalation, skin, eye.

Adenocarcinomas and squamous-cell carcinomas of the lung in rats were produced after inhalation or repeated intratracheal instillation of various forms of crystalline silica. Malignant lymphomas developed in rats after intrapleural and intraperitoneal injections of quartz suspensions and intrapleural injection of cristobalite and tridymite. Epidemiologic studies indicate lung cancer occurs more frequently among silicotics than in the general population.

## Medical Conditions Aggravated by Exposure

respiratory disorders

## RTECS Tumorigenic

The components of this material have been reviewed, and RTECS publishes the following endpoints:

**QUARTZ (14808-60-7)**

83 mg/kg intrapleural hamster TDLo; 4000 mg/kg implant mouse TDLo; 4554 mg/kg implant rat TD; 900 mg/kg implant rat TDLo; 50 mg/m3 inhalation rat TCLo (6 hour(s)); 450 mg/kg intraperitoneal rat TD (4 week(s)); 90 mg/kg intraperitoneal rat TD (4 week(s)); 45 mg/kg intraperitoneal rat TDLo; 100 mg/kg intrapleural rat TD; 200 mg/kg intrapleural rat TD; 90 mg/kg intrapleural rat TDLo; 111 mg/kg intratracheal rat TDLo; 100 mg/kg intratracheal rat TDLo (19 week(s)); 90 mg/kg intravenous rat TDLo

**ALUMINUM OXIDE (1344-28-1)**

200 mg/kg implant rat TD; 200 mg/kg implant rat TDLo; 90 mg/kg intrapleural rat TDLo

## RTECS Mutagenic

The components of this material have been reviewed, and RTECS publishes the following endpoints:

**CALCIUM FLUORIDE (7789-75-5)**

cytogenetic analysis rat Ascites tumor 1 gm/kg

**QUARTZ (14808-60-7)**

micronucleus test hamster lung 160 ug/cm2; micronucleus test human lung 40 ug/cm2; DNA damage human other cell types 120 mg/L/24 hour(s); DNA damage rat intratracheal 3 mg/kg

## RTECS Reproductive Effects

The components of this material have been reviewed, and RTECS publishes the following endpoints:

**CALCIUM FLUORIDE (7789-75-5)**

3200 mg/kg intraperitoneal mouse TDLo (pregnant female 9 day(s), continuous); 67200 mg/kg intraperitoneal mouse TDLo (pregnant female 1-21 day(s), continuous)

## Additional Data

Smoking may enhance the toxic effects.

## HEALTH EFFECTS

## Inhalation - Acute Exposure

CALCIUM FLUORIDE: Dust may cause irritation of the respiratory system. QUARTZ: Exposure to high concentrations may cause physical discomfort of the upper respiratory tract.

## Inhalation - Chronic Exposure

CALCIUM FLUORIDE: Workers repeatedly exposed to fluorspar, which contains silica, showed pulmonary changes including fibrosis and emphysema and increased incidences of lung cancer. Repeated or prolonged exposure to fluoride dust may cause nosebleeds, hoarseness, sore throat, sinus trouble and asthma. Fluorosis, as detailed in chronic ingestion may also occur. QUARTZ: Inhalation of very high concentrations of finely divided crystalline silica dust, exposure ranging from a few weeks to 4-5 years, may cause a rapidly developing silicosis, characterized by pulmonary insufficiency with severe dyspnea, violent coughing, tachypnea, weight loss, and cyanosis leading to the development of cor pulmonale and death within a relatively short period of time. A slowly developing silicosis may result from exposure for 6 months-30 years to relatively low levels of the dust. The first symptom is usually a slowly increasing, non-disabling, exertional dyspnea due to pulmonary fibrosis and the emphysema associated with it. Continued exposure may increase the rate of progression of the disease. Also, the fibrogenic action may continue when exposure ceases. As the fibrosis advances, other symptoms may include shortness of breath, productive cough, wheezing, chest tightness or pain, marked weakness, decreased capacity for work, and repeated non-specific chest illnesses. Cyanosis, clubbing of digits, orthopnea, or serious weight loss are not usually evident until the disease is advanced. Pulmonary infections, which may be indicated by hemoptysis, and cardiac decompensation may exacerbate the symptoms. Three major complications, which are the most frequent causes of death, are pulmonary tuberculosis, respiratory insufficiency which is due to the massive emphysematous and fibrotic changes and is sometimes accompanied by chronic cor pulmonale, and acute bronchopulmonary infection. A number of studies have shown that persons diagnosed as having silicosis have an increased risk for dying from lung cancer. This increase has been seen among miners, quarry workers, foundry workers, ceramic workers, granite workers, and stone cutters. In some of these studies, the risk of lung cancer increased with the duration of employment. Various forms and preparations of crystalline silica produced adenocarcinomas and squamous cell carcinomas of the lungs in rats.

## Skin Contact - Acute Exposure

CALCIUM FLUORIDE: May cause irritation. QUARTZ: May cause irritation of intact skin due to mechanical abrasion. If the skin is abraded, a heavy growth of scar tissue may be induced.

## Skin Contact - Chronic Exposure

CALCIUM FLUORIDE: Repeated or prolonged contact with dusts containing fluoride may result in dermatitis. QUARTZ: No data available.

## Eye Contact - Acute Exposure

CALCIUM FLUORIDE: Dust may cause irritation. QUARTZ: May cause irritation due to mechanical action. Particles of silica in the range of 2-3 micrometers introduced into the corneal stroma of rabbit eyes caused very little reaction. These same particles introduced into the anterior chamber resulted in an inflammatory reaction in 3-5 weeks with the formation of fibrotic nodules in the iridocorneal angle. Finely divided silica injected into the vitreous of rabbit eyes has caused necrosis of the retina and atrophy of the choroid.

## Eye Contact - Chronic Exposure

CALCIUM FLUORIDE: Repeated or prolonged contact with fluoride dust may cause conjunctivitis. QUARTZ: An abnormally high silicon content in the cornea, and a gradual decrease in visual acuity due to corneal opacities in the pupillary area, have been reported in a group of foundry workers.

### Ingestion - Acute Exposure

INORGANIC FLUORIDES: In the presence of moisture, corrosive hydrogen fluoride may be formed, especially in the stomach. Symptoms may include a burning sensation in the mouth and abdomen, sore tongue, a salty or soapy taste, nausea, salivation, difficulty speaking, thirst, vomiting, diarrhea, anorexia, and weight loss. Intense epigastric pain, deep ulceration of the esophagus and mucous membranes, hematemesis, and hematuria may also be present. Shock, manifested by symptoms of hypotension, weak pulse, pallor, dilated pupils, cyanosis, and anuria may occur. Muscle weakness, twitching, epileptiform convulsions, paresthesias, paralysis of the muscles of deglutition, carpopedal spasms, and painful spasms of the extremities and facial muscles may result. Other symptoms may include shortness of breath, headache, occasional urticaria, albuminuria, petechial hemorrhages, nystagmus, visual disturbances, optic neuritis, mental deterioration, unconsciousness, and coma. Cardiac arrhythmias, including ventricular fibrillation, leading to cardiac arrest have been reported. Death may also be due to cardiovascular collapse or respiratory failure. In addition to the corrosive effects, symptoms of acute fluoride toxicity may be caused by a variety of metabolic disorders, including hypocalcemia, hypomagnesemia, acidosis, and hyperkalemia. Pathologic findings may include congestion and hemorrhagic infiltration of all organs and degeneration of the kidneys and liver. In non-fatal cases, malaise and epigastric pain may persist for several days. QUARTZ: Effects of ingestion are due to mechanical action as crystalline silicas are biologically inert.

### Ingestion - Chronic Exposure

INORGANIC FLUORIDES: Repeated or prolonged ingestion may cause fluorosis characterized by nausea, vomiting, anorexia, diarrhea or constipation, weight loss, anemia, weakness and general ill health. Excessive calcification of the bones with brittleness, and calcification of the ligaments of the ribs, pelvis and spinal column may occur. Stiffness and limitation of motion may result. Polyuria and polydipsia may occur. A mottled appearance and altered form of the teeth may occur particularly during tooth formation. Exfoliative dermatitis, atopic dermatitis, stomatitis, gastrointestinal and respiratory allergy, and rarely, central nervous system involvement have been reported. QUARTZ: No data available.

### Ingestion - Other Toxicity Information

CALCIUM FLUORIDE: See information on inorganic fluorides.

## * * * Section 12 - ECOLOGICAL INFORMATION * * *

### Component Analysis - Aquatic Toxicity

**SULFUR (7704-34-9)**

**Fish:** 96 Hr LC50 Brachydanio rerio: 866 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: <14 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: >180 mg/L [static]

## * * * Section 13 - DISPOSAL CONSIDERATIONS * * *

### Disposal Methods

Dispose in accordance with all applicable regulations.

### Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.

## * * * Section 14 - TRANSPORT INFORMATION * * *

### US DOT Information

No Classification assigned.

### TDG Information

No Classification assigned.

### ADR Information

No Classification assigned.

### ADR Tunnel Code Restrictions

This list contains tunnel restriction codes for those substances and/or chemically related entries which are found in chapter 3.2 of the ADR regulations.

**PHOSPHORUS PENTOXIDE (1314-56-3)**

**SULFUR (7704-34-9)**

### RID Information

No Classification assigned.

### IATA Information

No Classification assigned.

### ICAO Information

No Classification assigned.

### IMDG Information

No Classification assigned.

## * * * Section 15 - REGULATORY INFORMATION * * *

### U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

**ALUMINUM OXIDE (1344-28-1)**

**SARA 313:** 1.0 % de minimis concentration (fibrous forms)

**SARA Section 311/312 (40 CFR 370 Subparts B and C)**

**Acute Health:** Yes **Chronic Health:** Yes **Fire:** No **Pressure:** No **Reactive:** No

### U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

| Component | CAS | CA | MA | MN | NJ | PA | RI |
|---|---|---|---|---|---|---|---|
| CALCIUM FLUORIDE ([1]related to: Fluorides) | 7789-75-5 | No | No | Yes[1] | Yes[1] | No | Yes[1] |
| QUARTZ | 14808-60-7 | No | Yes | Yes | Yes | Yes | Yes |
| ALUMINUM OXIDE | 1344-28-1 | Yes | Yes | Yes | Yes | Yes | Yes |
| FERRIC OXIDE RED | 1309-37-1 | Yes | Yes | Yes | Yes | Yes | Yes |
| PHOSPHORUS PENTOXIDE | 1314-56-3 | No | Yes | No | Yes | Yes | No |
| SULFUR | 7704-34-9 | Yes | Yes | No | Yes | Yes | Yes |

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

### Component Analysis

**QUARTZ (14808-60-7)**

**Carc:** carcinogen, initial date 10/1/88 (airborne particles of respirable size)

## Canada

## Germany Water Classification

**CALCIUM FLUORIDE (7789-75-5)**

Number 804, hazard class 1 - low hazard to waters

**QUARTZ (14808-60-7)**

Number 849, not considered hazardous to water

**QUARTZ (14808-60-7)**

Number 849, not considered hazardous to water

**CALCITE (13397-26-7)**

Number 317, not considered hazardous to water

**ALUMINUM OXIDE (1344-28-1)**

Number 1346, not considered hazardous to water

**FERRIC OXIDE RED (1309-37-1)**

Number 800, not considered hazardous to water

**PHOSPHORUS PENTOXIDE (1314-56-3)**

Number 391, hazard class 1 - low hazard to waters

**SULFUR (7704-34-9)**

Number 842, not considered hazardous to water

**SULFUR (7704-34-9)**

Number 753, hazard class 1 - low hazard to waters

## EU Marking and Labelling

### Symbols

**T** Toxic

### Risk Phrases

**R49** May cause cancer by inhalation.

## Component Analysis - Inventory

| Component | CAS | US | CA | EU | AU | PH | JP | KR | CN | NZ |
|---|---|---|---|---|---|---|---|---|---|---|
| CALCIUM FLUORIDE | 7789-75-5 | Yes | DSL | EIN | Yes | Yes | Yes | Yes | Yes | Yes |
| QUARTZ | 14808-60-7 | Yes | DSL | EIN | Yes | Yes | Yes | Yes | Yes | Yes |
| CALCITE | 13397-26-7 | No | No | No | No | Yes | No | Yes | Yes | Yes |
| ALUMINUM OXIDE | 1344-28-1 | Yes | DSL | EIN | Yes | Yes | Yes | Yes | Yes | Yes |
| FERRIC OXIDE RED | 1309-37-1 | Yes | DSL | EIN | Yes | Yes | Yes | Yes | Yes | Yes |
| PHOSPHORUS PENTOXIDE | 1314-56-3 | Yes | DSL | EIN | Yes | Yes | Yes | Yes | Yes | Yes |
| SULFUR | 7704-34-9 | Yes | DSL | EIN | Yes | Yes | No | Yes | Yes | Yes |

## * * * Section 16 - OTHER INFORMATION * * *

### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

### Full text of R phrases in Section 3

**R35** Causes severe burns.
**R36** Irritating to eyes.
**R37** Irritating to respiratory system.
**R38** Irritating to skin.
**R49** May cause cancer by inhalation.

### Other Information

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