

# MATERIAL SAFETY DATA SHEET



**LANXESS Corporation**  
**Product Safety & Regulatory Affairs**  
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**USA**

**TRANSPORTATION EMERGENCY**  
CALL CHEMTREC: (800) 424-9300  
INTERNATIONAL: (703) 527-3887

**NON-TRANSPORTATION**  
LANXESS Emergency Phone: (800) 410-3063  
LANXESS Information Phone: (800) LANXESS

## 1. Product and Company Identification

**Product Name:** SUEDE CH  
**Material Number:** 3745884  
**Chemical Family:** Pigmented Portland Cement/Silica Mixture

## 2. Hazards Identification

### Emergency Overview

**WARNING! Color:** Beige **Form:** solid Powder **Odor:** Odorless.  
Causes respiratory tract irritation. Causes skin irritation. Causes eye irritation. May cause lung damage. Contains material which can cause cancer.

### Potential Health Effects

**Primary Routes of Entry:** Inhalation, Skin Contact, Eye Contact, Ingestion

**Medical Conditions Aggravated by Exposure:** Respiratory disorders, Eye disorders, Skin disorders

### HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

#### Inhalation

##### Acute Inhalation

##### For Product: SUEDE CH

Causes respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

##### For Component: Crystalline Quartz Silica

May be harmful by inhalation. May cause mechanical irritation.

##### For Component: Iron (III) Oxide

May cause mechanical irritation.

**For Component: Calcium sulfate**

Causes respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

**Skin**

**Acute Skin**

**For Product: SUEDE CH**

Causes irritation with symptoms of reddening, itching, and swelling. Not expected to be a skin sensitizer.

**For Component: Crystalline Quartz Silica**

May cause mechanical irritation.

**For Component: Portland Cement**

Corrosive with symptoms of reddening, itching, swelling, burning and possible permanent damage. Not expected to be a skin sensitizer.

**For Component: Iron (III) Oxide**

May cause mechanical irritation.

**For Component: Calcium sulfate**

May cause irritation with symptoms of reddening and itching.

**For Component: Titanium dioxide (Rutile)**

Not expected to be irritating.

**Chronic Skin**

**For Product: SUEDE CH**

Prolonged or repeated skin contact may cause dermatitis with symptoms of red, itchy, dry skin.

**Eye**

**Acute Eye**

**For Product: SUEDE CH**

Causes irritation with symptoms of reddening, tearing, stinging, and swelling.

**For Component: Crystalline Quartz Silica**

May cause mechanical irritation.

**For Component: Portland Cement**

Causes irritation with symptoms of reddening, tearing, stinging, and swelling.

**For Component: Iron (III) Oxide**

May cause mechanical irritation.

**For Component: Calcium sulfate**

May cause irritation with symptoms of reddening, tearing and stinging.

**For Component: Titanium dioxide (Rutile)**

Not expected to be irritating.

**Ingestion**

**Acute Ingestion**

**For Product: SUEDE CH**

Not expected to be harmful if swallowed.

**For Component: Crystalline Quartz Silica**

Not expected to be harmful if swallowed.

**For Component: Calcium sulfate**

Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea. Not expected to be harmful if swallowed.

**For Component: Titanium dioxide (Rutile)**

Not expected to be harmful if swallowed.

**General Effects of Exposure**

**Acute Effects of Exposure**

**For Product: SUEDE CH**

Exposure to Silica, Quartz can cause a very serious lung disease called Silicosis with cough, shortness of breath, and changes in chest x-ray. The earliest symptoms of silicosis may include: Shortness of breath, coughing, wheezing, fatigue, chest pain, loss of appetite and fever.

**For Component: Crystalline Quartz Silica**

Exposure to Silica, Quartz can cause a very serious lung disease called Silicosis with cough, shortness of breath, and changes in chest x-ray. The earliest symptoms of silicosis may include: Shortness of breath, coughing, wheezing, fatigue, chest pain, loss of appetite and fever.

**Chronic Effects of Exposure**

**For Product: SUEDE CH**

Excessive exposure to airborne crystalline silica can cause fibrotic lung damage, with scarring of the lungs with cough and shortness of breath. This is called "Silicosis". This is generally a slowly developing fibrotic disease as symptoms are usually delayed for 10 years or more. Symptoms are dyspnea, chest pain, breathlessness, and cough. The chronic lung scarring developed from the silica dust causes a progressive massive fibrosis. This may lead to increased susceptibility to tuberculosis.

**For Component: Crystalline Quartz Silica**

Excessive exposure to airborne crystalline silica can cause fibrotic lung damage, with scarring of the lungs with cough and shortness of breath. This is called "Silicosis". This is generally a slowly developing fibrotic disease as symptoms are usually delayed for 10 years or more. Symptoms are dyspnea, chest pain, breathlessness, and cough. The chronic lung scarring developed from the silica dust causes a progressive massive fibrosis. This may lead to increased susceptibility to tuberculosis.

**Other Effects of Exposure**

**For Product: SUEDE CH**

Prolonged inhalation (6 to 10 years) of iron oxide fume has been reported to produce changes in lung x-rays of exposed individuals. This condition, siderosis, is considered to be a benign pneumoconiosis that exhibits no adverse health effects. Siderosis has been observed among occupations such as arc-welders where iron oxide fumes are present. To the best of our knowledge, this condition has not been observed after prolonged exposure to iron oxide pigments.

**For Component: Iron (III) Oxide**

Prolonged inhalation (6 to 10 years) of iron oxide fume has been reported to produce changes in lung x-rays of exposed individuals. This condition, siderosis, is considered to be a benign pneumoconiosis that exhibits no adverse health effects. Siderosis has been observed among occupations such as arc-welders where iron oxide fumes are present. To the best of our knowledge, this condition has not been observed after prolonged exposure to iron oxide pigments.

**Carcinogenic Effects**

**For Component: Titanium dioxide (Rutile)**

Human epidemiology studies do not suggest an association between occupational exposure to titanium dioxide and risk of cancer.

**Carcinogenicity:**

Crystalline Quartz Silica

**NTP** - Hazard Designation: Known carcinogen.

**IARC** - Overall evaluation: 1 Human carcinogen.

Titanium dioxide (Rutile) IARC - Overall evaluation: 2B Possible carcinogen.

### 3. Composition/Information on Ingredients

#### Hazardous Components

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
60 - 100%	Crystalline Quartz Silica	14808-60-7
20 - 30%	Portland Cement	65997-15-1
1 - 5%	Iron (III) Oxide	1309-37-1
1 - 5%	Calcium sulfate	7778-18-9
0.1 - 1%	Titanium dioxide (Rutile)	13463-67-7

### 4. First Aid Measures

#### Eye Contact

In case of contact, flush eyes with plenty of water for at least 15 minutes. Use fingers to ensure that eyelids are separated and that the eye is being irrigated. Call a physician immediately.

#### Skin Contact

In case of skin contact, wash affected areas with soap and water. Immediately remove contaminated clothing and shoes. Get medical attention. Wash clothing and shoes before reuse.

#### Inhalation

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

#### Ingestion

Get medical attention.

### 5. Fire-Fighting Measures

**Suitable Extinguishing Media:** Material is not combustible. Use extinguishing media suitable for other combustible materials in the area.

#### Special Fire Fighting Procedures

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.

#### Unusual Fire/Explosion Hazards

Water runoff from fire fighting may be corrosive.

### 6. Accidental release measures

#### Spill and Leak Procedures

Cleanup personnel must use appropriate personal protective equipment. Remove mechanically by a method that minimizes the generation of airborne dust (vacuum cleaner, wet mopping, etc.) Collect and place in

appropriately marked sealable containers for disposal.

## 7. Handling and Storage

### Storage Period

Not Established

### Handling/Storage Precautions

Avoid breathing dust. Avoid contact with skin or clothing. Avoid contact with eyes. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Keep container closed when not in use.

### Further Info on Storage Conditions

Avoid contact with moisture/water. Minimize dust generation and accumulation.

## 8. Exposure Controls / Personal Protection

### Crystalline Quartz Silica (14808-60-7)

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

Time Weighted Average (TWA): 2.4 millions of particles per cubic foot of air (Respirable.)The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.

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

Time Weighted Average (TWA): 0.1 mg/m<sup>3</sup> (Respirable.)The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.

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

Time Weighted Average (TWA): 0.3 mg/m<sup>3</sup> (Total dust.)The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 0.025 mg/m<sup>3</sup> (Respirable fraction.)

US. ACGIH Threshold Limit Values

Hazard Designation: Group A2 Suspected human carcinogen.

### Portland Cement (65997-15-1)

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 10 mg/m<sup>3</sup> The value is for particulate matter containing no asbestos and <1% crystalline silica.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

PEL: 5 mg/m<sup>3</sup> (Respirable fraction.)

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

PEL: 15 mg/m<sup>3</sup> (Total dust.)

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

Time Weighted Average (TWA): 50 millions of particles per cubic foot of air

### Iron (III) Oxide (1309-37-1)

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

PEL: 10 mg/m<sup>3</sup> (Fume.)

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 5 mg/m<sup>3</sup> (Respirable fraction.)

US. ACGIH Threshold Limit Values  
Hazard Designation: Group A4 Not classifiable as a human carcinogen.

**Calcium sulfate (7778-18-9)**

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)  
PEL: 5 mg/m<sup>3</sup> (Respirable fraction.)  
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)  
PEL: 15 mg/m<sup>3</sup> (Total dust.)  
US. ACGIH Threshold Limit Values  
Time Weighted Average (TWA): 10 mg/m<sup>3</sup> (Inhalable fraction.)

**Titanium dioxide (Rutile) (13463-67-7)**

US. ACGIH Threshold Limit Values  
Time Weighted Average (TWA): 10 mg/m<sup>3</sup>  
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)  
PEL: 15 mg/m<sup>3</sup> (Total dust.)  
US. ACGIH Threshold Limit Values  
Hazard Designation: Group A4 Not classifiable as a human carcinogen.

**Industrial Hygiene/Ventilation Measures**

General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/guidelines.

**Respiratory Protection**

The following respirator is recommended if airborne concentrations exceed the appropriate standard/guideline., NIOSH approved, air-purifying particulate respirator with P-100 filters., When respirators are in use, an OSHA compliant respirator program is required (29 CFR 1910.134). Airborne concentrations must not exceed the respirator's Assigned Protection Factor multiplied by the appropriate standard/guideline.

**Hand Protection**

gloves

**Eye Protection**

Chemical safety goggles or safety glasses with side-shields.

**Skin and body protection**

Wear cloth work clothing including long pants and long-sleeved shirts.

**Additional Protective Measures**

Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

**9. Physical and chemical properties**

<b>Form:</b>	solid
<b>Appearance:</b>	Powder
<b>Color:</b>	Beige
<b>Odor:</b>	Odorless
<b>Melting Point:</b>	Not Established
<b>Boiling Point/Range:</b>	Not Established
<b>Flash Point:</b>	Not Applicable
<b>Lower Explosion Limit:</b>	Not Established
<b>Upper Explosion Limit:</b>	Not Established

**Vapor Pressure:** Not Applicable  
**Specific Gravity:** Not Established  
**Solubility in Water:** Insoluble  
**Bulk Density:** Not Established

## 10. Stability and Reactivity

### Hazardous Reactions

Hazardous polymerization does not occur. Contact with water/moisture causes formation of corrosive reaction products.

### Stability

Stable

### Materials to avoid

Oxidizing agents

### Conditions to avoid

None known.

### Hazardous decomposition products

None known.

## 11. Toxicological Information

### Toxicity Data for Crystalline Quartz Silica

#### Mutagenicity

Genetic Toxicity in Vitro:

Ames: Negative results were reported in various in vitro studies. (Salmonella typhimurium, Metabolic

Activation: with/without)

Genetic Toxicity in Vivo:

Sister Chromatid Exchange: ambiguous (hamster)

#### Carcinogenicity

rat, Male/Female, inhalation, 2 years, 6 hrs/day 5 days/week  
positive

### Toxicity Data for Portland Cement

#### Skin Irritation

rabbit, Corrosive

#### Eye Irritation

rabbit, Non-irritating

Human, Eye Irritation

#### Sensitization

non-sensitizer

### Toxicity Data for Iron (III) Oxide

#### Acute Oral Toxicity

LD50: > 5,000 mg/kg (Rat)

#### Acute dermal toxicity

LD50: 5,500 mg/kg (Rat)

**Skin Irritation**

rabbit, Acute Dermal Irritation, Exposure Time: 24 hrs, Non-irritating

**Eye Irritation**

rabbit, Acute Eye Irritation Study, Non-irritating

**Toxicity Data for Calcium sulfate****Acute Oral Toxicity**

LD50: > 5,000 mg/kg (Rat)

**Skin Irritation**

Human, Non-irritating

**Eye Irritation**

Human, Non-irritating

**Sensitization**

non-sensitizer (Human)

**Mutagenicity**

Genetic Toxicity in Vitro:

Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

**Toxicity Data for Titanium dioxide (Rutile)****Acute Oral Toxicity**

LD50: > 5,000 mg/kg (Rat)

**Acute Inhalation Toxicity**

LC0: > 6.82 mg/l, dust/particulate, 4 hrs (Rat)

**Acute dermal toxicity**

LD50: > 5,000 mg/kg (rabbit)

**Skin Irritation**

rabbit, Exposure Time: 24 hrs, Non-irritating

**Eye Irritation**

rabbit, Draize, Non-irritating

**Sensitization**

dermal: non-sensitizer (Guinea pig, Maximization Test)

dermal: non-sensitizer (Human, Patch Test)

**Repeated Dose Toxicity**

28 Days, inhalation: NOAEL: 35 mg/m<sup>3</sup>, (Rat)

**Mutagenicity**

Genetic Toxicity in Vitro:

Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

Drosophila SLRL test: negative (Drosophila melanogaster)

**Carcinogenicity**

In lifetime inhalation studies of rats, airborne respirable-sized titanium dioxide particles were shown to cause lung tumors at concentrations associated with substantial particle lung burdens and pulmonary overload. Mice and hamsters did not develop lung tumors under similar testing conditions.



## 12. Ecological Information

### Ecological Data for Iron (III) Oxide

#### **Acute and Prolonged Toxicity to Fish**

LC0: > 1,000 mg/l (Golden orfe (*Leuciscus idus*), 48 hrs)

#### **Toxicity to Microorganisms**

EC0: > 5,000 mg/l, (*Pseudomonas fluorescens*, 24 hrs)

#### **Toxicity Other Non-Mammal Terrestrial Species**

No Harmful effects

### Ecological Data for Calcium sulfate

#### **Biodegradation**

The methods for determining the biological degradability are not applicable to inorganic substances.

#### **Acute and Prolonged Toxicity to Fish**

2,980 mg/l (Bluegill (*Lepomis macrochirus*), 96 hrs)

#### **Acute Toxicity to Aquatic Invertebrates**

EC0: 2,500 - 5,000 mg/l (72 hrs)

#### **Toxicity to Aquatic Plants**

EC50: 3,200 mg/l, (other: algae, 5 Days)

### Ecological Data for Titanium dioxide (Rutile)

#### **Acute and Prolonged Toxicity to Fish**

LC0: > 1,000 mg/l (Golden orfe (*Leuciscus idus*), 48 hrs)

#### **Acute Toxicity to Aquatic Invertebrates**

EC0: > 3 mg/l (Water flea (*Daphnia magna*))

#### **Toxicity to Microorganisms**

EC0: > 10,000 mg/l, (*Pseudomonas fluorescens*, 24 hrs)

EC0: > 5,000 mg/l, (*Escherichia coli*)

## 13. Disposal considerations

### **Waste Disposal Method**

Waste disposal should be in accordance with existing federal, state, provincial, and/or local environmental control laws.

### **Empty Container Precautions**

Do not reuse empty container. Recondition or dispose of empty container in accordance with governmental regulations. Label precautions also apply to this container when empty.

## 14. Transportation information

### Land transport (DOT)

Non-Regulated

### Sea transport (IMDG)

Non-Regulated

### Air transport (ICAO/IATA)

Non-Regulated

## 15. Regulatory Information

### United States Federal Regulations

**OSHA Hazcom Standard Rating:** Hazardous

**US. Toxic Substances Control Act:** Listed on the TSCA Inventory.

**US. EPA CERCLA Hazardous Substances (40 CFR 302):**

#### Components

None

**SARA Section 311/312 Hazard Categories:**

Acute Health Hazard, Chronic Health Hazard

**US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):**

#### Components

None

**US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:**

#### Components

None

**US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):**

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

### State Right-To-Know Information

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

Trace heavy metal content reported below is based on random sample analyses and content may vary from batch to batch.

**Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:**

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
60 - 100%	Crystalline Quartz Silica	14808-60-7
20 - 30%	Portland Cement	65997-15-1
1 - 5%	Iron (III) Oxide	1309-37-1
1 - 5%	Calcium sulfate	7778-18-9

**Pennsylvania Right to Know Special Hazard Substance List:**

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
0.016%	Nickel (Ni)	7440-02-0
0.016%	Chromium	7440-47-3

**MA Right to Know Extraordinarily Hazardous Substance List:**

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
60 - 100%	Crystalline Quartz Silica	14808-60-7
0.016%	Nickel (Ni)	7440-02-0
0.016%	Chromium	7440-47-3

**California Prop. 65:**

**Warning! This product contains chemical(s) known to the State of California to be Carcinogenic.**

<u>Weight %</u>	<u>Components</u>	<u>CAS-No.</u>
60 - 100%	Crystalline Quartz Silica	14808-60-7
0.016%	Nickel (Ni)	7440-02-0

**16. Other Information**

**NFPA 704M Rating**

<b>Health</b>	2
<b>Flammability</b>	0
<b>Reactivity</b>	0
<b>Other</b>	

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

**HMIS Rating**

<b>Health</b>	2*
<b>Flammability</b>	0
<b>Physical Hazard</b>	0

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

\* = Chronic Health Hazard

LANXESS Corporation's method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by LANXESS Corporation as a customer service.

Contact Person: Product Safety Department  
Telephone: (800) LANXESS  
MSDS Number: 000000002762  
Version Date: 08/14/2007  
Report Version: 2.12

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|| Changes since the last version will be highlighted in the margin. This version replaces all previous versions.