

SAFETY DATA SHEET

Preparation Date: 6/6/2016

Revision Date: 6/6/2016

Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: C1196
Product Name: CELITE(R) 545

Other means of identification

Synonyms: Kieselguhr, soda ash flux-calcined
 Diatomaceous earth, flux-calcined
CAS #: 68855-54-9
RTECS # Not available
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000

Order Online At: <https://www.spectrumchemical.com>

Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Carcinogenicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 1

Label elements

Danger**Hazard statements**

May cause cancer

Causes damage to organs through prolonged or repeated exposure

**Hazards not otherwise classified (HNOC)**

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/protective clothing/eye protection/face protection

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Precautionary Statements - Response*IF exposed or concerned: Get medical advice/attention***Precautionary Statements - Storage**

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Diatomaceous Earth, flux-calcined (This product may contain up to 54% crystalline in the forms of Cristobalite and Quartz) 68855-54-9	68855-54-9	100
Cristobalite (crystalline silica) 14464-46-1	14464-46-1	<=50
Quartz (Crystalline Silica) 14808-60-7	14808-60-7	<=4

4. FIRST AID MEASURES**First aid measures****General Advice:**

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222

4. FIRST AID MEASURES

Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops. Consult a physician if necessary.
Eye Contact:	Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.
Most important symptoms and effects, both acute and delayed	
Symptoms	May cause eye/skin/respiratory tract irritation. Coughing and wheezing. Dyspnea (Difficulty breathing and shortness of breath). Sore throat. Dry throat. May cause silicosis.
Indication of any immediate medical attention and special treatment needed	
Notes to Physician:	Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: No information available.

Specific hazards: No information available.

Special Protective Actions for Firefighters

Specific Methods: No information available.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapors/dust. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container.

Incompatible Materials:

Hydrofluoric acid. Fluoride. Oxygen difluoride. Chlorine trifluoride. Alkaline Solutions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Diatomaceous Earth, flux-calcined (This product may contain up to 54% crystalline in the forms of Cristobalite and Quartz) 68855-54-9	None	None	None	None
Cristobalite (crystalline silica) 14464-46-1	(1/2)(30)/(%SiO ₂ + 2) mg/m ³ TWA total dust (1/2)(250)/(%SiO ₂ + 5) mppcf TWA respirable fraction (1/2)(10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction	0.05 mg/m ³ TWA	0.025 mg/m ³ TWA respirable fraction	None
Quartz (Crystalline Silica) 14808-60-7	(30)/(%SiO ₂ + 2) mg/m ³ TWA total dust (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction (10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction	0.05 mg/m ³ TWA	0.025 mg/m ³ TWA respirable fraction	None

Canada

Components	Alberta	British Columbia	Ontario	Quebec
Diatomaceous Earth, flux-calcined (This product may contain up to 54% crystalline in the forms of Cristobalite and Quartz) 68855-54-9	None	None	None	None
Cristobalite (crystalline silica) 14464-46-1	0.025 mg/m ³ TWA respirable particulate	0.025 mg/m ³ TWA respirable	0.05 mg/m ³ TWA respirable Silica, crystalline	0.05 mg/m ³ TWAEV respirable dust
Quartz (Crystalline Silica) 14808-60-7	0.025 mg/m ³ TWA respirable particulate	0.025 mg/m ³ TWA respirable	0.10 mg/m ³ TWA respirable Silica, crystalline	0.1 mg/m ³ TWAEV respirable dust

Australia and Mexico

Components	Australia	Mexico
Diatomaceous Earth, flux-calcined (This product may contain up to 54% crystalline in the forms of Cristobalite and Quartz) 68855-54-9	None	None
Cristobalite (crystalline silica) 14464-46-1	0.1 mg/m ³ TWA	0.05 mg/m ³ TWA
Quartz (Crystalline Silica) 14808-60-7	0.1 mg/m ³ TWA	0.1 mg/m ³ TWA

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

- Eye protection:** Goggles or Safety glasses with side-shields
- Skin and body protection:** Chemical resistant apron. Gloves. Long sleeved clothing.
- Respiratory protection:** Wear respirator with dust filter.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid	Appearance: Powder.	Color: White.
Odor: Odorless.	Taste No information available	Formula: No information available
Molecular/Formula weight: No information available	Flammability: No information available	Flashpoint (°C/°F): No information available.
Flash Point Tested according to: Not available	Autoignition Temperature (°C/°F): No information available	Lower Explosion Limit (%): No information available
Upper Explosion Limit (%): No information available	Melting point/range(°C/°F): No information available	Decomposition temperature(°C/°F): No information available
Boiling point/range(°C/°F): No information available	Bulk density: No information available	Density (g/cm3): No information available
Specific gravity: 2.3	pH: No information available	Vapor pressure @ 20°C (kPa): No information available
Evaporation rate: No information available	Vapor density: No information available	VOC content (g/L): No information available
Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): No information available	Viscosity: No information available
Miscibility: No information available	Solubility: Insoluble in cold water Insoluble in hot water	

10. STABILITY AND REACTIVITY

Reactivity

Reactive with Hydrofluoric acid

Chemical stability

Stability: Stable at normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Incompatible materials.

Incompatible Materials: Hydrofluoric acid. Fluoride. Oxygen difluoride. Chlorine trifluoride. Alkaline Solutions.

Hazardous decomposition products: No information available

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Ingestion. Inhalation.

Acute Toxicity

Component Information

Diatomaceous Earth, flux-calcined (This product may contain up to 54% crystalline in the forms of Cristobalite and Quartz) - 68855-54-9

LD50/oral/rat = No information available
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Cristobalite (crystalline silica) - 14464-46-1

LD50/oral/rat = No information available
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Quartz (Crystalline Silica) - 14808-60-7

LD50/oral/rat = 500 mg/kg Oral LD50 Rat (from EU Commission - EU Chemicals Bureau -
partical size was 10-20 um)
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = >5000mg/kg

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Inhalation Irritating to respiratory system. Flux-calcined Diatomaceous earth contains crystalline silica. Acute silicosis (a form of pneumoconiosis) and lung damage from overwhelming exposure to silica dust can occur.. Symptoms may include coughing and wheezing. May cause dyspnea (difficulty breathing or shortness of breath). May cause dry and sore throat.

Ingestion Expected low hazard. . Health injuries are not known or expected under normal use.

Aspiration hazard No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Inhalation: Chronic exposure to crystalline silica via inhalation can also cause silicosis, the most important form of pneumoconiosis. In silicosis, fibrotic nodules form in the lung around silica deposits (a form of lung scarring). Symptoms include coughing, wheezing, shortness of breath/dyspnea, decrease chest expansion, a progressive decrease in lung function. Chronic inhalation of crystalline silica is also a lung cancer hazard. Risk of cancer depends upon duration and level of exposure. It also greatly increases the risk for other diseases such as tuberculosis, systemic lupus erythematosus, scleroderma, and Grave's disease. May also affect blood (changes in white blood cell count), the thymus, and spleen.
Aggravation of Pre-existing Conditions: Inhalation may increase the progression of tuberculosis; susceptibility is apparently not increased. Persons with impaired respiratory function/pre-existing upper respiratory and lung disease (bronchitis, asthma, emphysema) may be more susceptible to the effects of this substance. Smoking can increase the risk of lung injury..

Sensitization: No information available

Mutagenic Effects: No information available

Carcinogenic effects: May cause cancer based on animal test data.

Components	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Diatomaceous Earth, flux-calcined (This product may contain up to 54% crystalline in the forms of Cristobalite and Quartz)	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Cristobalite (crystalline silica)	Group 1 (Carcinogenic to Humans) - Monograph 68 [1997] Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources	A2 Suspected Human Carcinogen	Known Human Carcinogen Silica, crystalline (respirable size)	Present	Not listed	Not listed

Quartz (Crystalline Silica)	Group 1 - Carcinogenic to Humans Monograph 100C [2012] Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources Monograph 68 [1997] (listed as Silica dust, crystalline, in the form of quartz or cristobalite)	A2 Suspected Human Carcinogen	Known Human Carcinogen	Present	Not listed	Not listed
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ACGIH (American Conference of Governmental Industrial Hygienists)
IARC (International Agency for Research on Cancer)
NTP (National Toxicology Program)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available

Developmental Effects: No information available

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Target Organs: Lungs. Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Diatomaceous Earth, flux-calcined (This product may contain up to 54% crystalline in the forms of Cristobalite and Quartz)	None	None	None	None
Cristobalite (crystalline silica)	None	None	None	None
Quartz (Crystalline Silica)	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: None
ERG No: No information available
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: No Information available
Symbol(s): No information available

TDG (Canada)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant: No Information available

ADR

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available

IMO / IMDG

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant: No information available

RID

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

ICAO

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available

14. TRANSPORT INFORMATION

Packing Group: No information available

IATA

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
ERG Code: No information available
Special Provisions No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Diatomaceous Earth, flux-calcined (This product may contain up to 54% crystalline in the forms of Cristobalite and Quartz)</i>	Not Listed	Not present	Not present	Not present	Not present	Not present	Not present
<i>Cristobalite (crystalline silica)</i>	Present	Present KE-09017	Present	Present (1)-548	Present	Present	Present 238-455-4
<i>Quartz (Crystalline Silica)</i>	Present	Present KE-29983	Present	Present (1)-548	Present	Present	Present 238-878-4

U.S. Regulations

Cristobalite (crystalline silica)

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 1657
Pennsylvania RTK: Present
Minnesota - Hazardous Substance List: Present

Quartz (Crystalline Silica)

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 1660
Pennsylvania RTK: Present
Minnesota - Hazardous Substance List: Present

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

WARNING: This product contains a chemical known to the State of California to cause cancer. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Diatomaceous Earth, flux-calcined (This product may contain up to 54% crystalline in the forms of Cristobalite and Quartz)	Not Listed	Not Listed	Not Listed	Not Listed
<i>Cristobalite (crystalline silica)</i>	Not Listed	Not Listed	Not Listed	Not Listed
<i>Quartz (Crystalline Silica)</i>	carcinogen (listed as Silica, crystalline (airborne particles of respirable size))	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
<i>Diatomaceous Earth, flux-calcined (This product may contain up to 54% crystalline in the forms of Cristobalite and Quartz)</i>	None	None	None	None	None
<i>Cristobalite (crystalline silica)</i>	None	None	None	None	None
<i>Quartz (Crystalline Silica)</i>	None	None	None	None	None

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
<i>Diatomaceous Earth, flux-calcined (This product may contain up to 54% crystalline in the forms of Cristobalite and Quartz)</i>	Not Applicable	Not Applicable
<i>Cristobalite (crystalline silica)</i>	Not Applicable	Not Applicable
<i>Quartz (Crystalline Silica)</i>	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

D2A Very toxic materials

Cristobalite (crystalline silica)

D2A In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Silica, crystalline, encapsulated on Health Canada's WHMIS Division website.

Quartz (Crystalline Silica)

D2A In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Silica, crystalline, encapsulated on Health Canada's WHMIS Division website.

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
<i>Cristobalite (crystalline silica)</i>	1 %
<i>Quartz (Crystalline Silica)</i>	1 %

Inventory

Components	Canada (DSL)	Canada (NDSL)
<i>Diatomaceous Earth, flux-calcined (This product may contain up to 54% crystalline in the forms of Cristobalite and Quartz)</i>	Not Listed	Not Listed
<i>Cristobalite (crystalline silica)</i>	Present	Not Listed
<i>Quartz (Crystalline Silica)</i>	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances
<i>Diatomaceous Earth, flux-calcined (This product may contain up to 54% crystalline in the forms of Cristobalite and Quartz)</i>	Not listed
<i>Cristobalite (crystalline silica)</i>	Not listed
<i>Quartz (Crystalline Silica)</i>	Not listed

Components	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Diatomaceous Earth, flux-calcined (This product may contain up to 54% crystalline in the forms of Cristobalite and Quartz)	Not listed
Cristobalite (crystalline silica)	Not listed
Quartz (Crystalline Silica)	Not listed

EU Classification

R-phrase(s)

R37 - Irritating to respiratory system.

R48 - Danger of serious damage to health by prolonged exposure.

R49 - May cause cancer by inhalation.

S -phrase(s)

S22 - Do not breathe dust.

S36 - Wear suitable protective clothing.

Components	Classification	Concentration Limits:	Safety Phrases
Diatomaceous Earth, flux-calcined (This product may contain up to 54% crystalline in the forms of Cristobalite and Quartz)		No information	
Cristobalite (crystalline silica)		No information	
Quartz (Crystalline Silica)		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

T - Toxic

Xi - Irritant.



16. OTHER INFORMATION

16. OTHER INFORMATION

Preparation Date: 6/6/2016
Revision Date: 6/6/2016
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet