

EXHIBIT 13

Material Safety Data Sheet, Spectrum Chemical Mfg. Corp., Gardena, CA



SAFETY DATA SHEET

Preparation Date: 04/15/2015

Revision Date: 12/01/2016

Revision Number: G3

1. IDENTIFICATION

Product identifier

Product code: BE125
Product Name: BENTONITE, POWDER, NF

Other means of identification

Synonyms: No information available
CAS #: 1302-78-9
RTECS # CT9450000
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 considered hazardous according to 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 %
Bentonite	1302-78-9	90
Quartz (Crystalline Silica)	14808-60-7	10

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.

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. May cause coughing and shortness of

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breath. Sneezing. May cause pulmonary edema. 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

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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. Hygroscopic.

Incompatible Materials:

Strong acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WHEEL
Bentonite	1302-78-9	None	None	None	None
Quartz (Crystalline Silica)	14808-60-7	50 µg/m³ TWA (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction (10)/(%SiO ₂ + 2) mg/m³ TWA respirable fraction	0.05 mg/m³ TWA	0.025 mg/m³ TWA respirable particulate matter	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Bentonite	1302-78-9	None	None	None	None
Quartz (Crystalline Silica)	14808-60-7	0.025 mg/m³ TWA respirable particulate	0.025 mg/m³ TWA respirable	0.10 mg/m³ TWA respirable Silica, crystalline	0.1 mg/m³ TWA EV respirable dust

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Bentonite	1302-78-9	None	None
Quartz (Crystalline Silica)	14808-60-7	0.1 mg/m³ TWA	0.1 mg/m³ 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

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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

Physical state: Solid	Appearance: Powder.	Color: Beige. Light gray. Tan.
Odor: Odorless.	Taste Tasteless.	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: 2.5-2.6	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 acids Insoluble in cold water Insoluble in common organic solvents Insoluble in hot water In the presence of water, it forms a translucent and viscous suspension	

10. STABILITY AND REACTIVITY

Reactivity

Reactive with strong acids

Chemical stability

Stability: Hygroscopic. Stable at normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Exposure to moisture. Incompatible materials.

Incompatible Materials: Strong acids

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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

Bentonite

CAS-No. 1302-78-9

LD50/oral/rat = > 5000 mg/kg Oral LD50 Rat
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)

CAS-No. 14808-60-7

LD50/oral/rat = 500 mg/kg Oral LD50 Rat (from EU Commission - EU Chemicals Bureau - particle 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 = > 5000 mg/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

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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 May cause respiratory tract irritation. Symptoms may include coughing and sneezing. May cause dyspnea (difficulty breathing or shortness of breath). May cause delayed pulmonary edema.
Ingestion Expected low hazard.
Aspiration hazard No information available.

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

Chronic Toxicity Inhalation: Prolonged or repeated inhalation may cause pneumoconiosis, bronchospasm, asthma. Symptoms may include coughing, wheezing, shortness of breath, difficulty breathing, reduced lung function, repeated non-specific chest illness. This product contains a small amount of naturally occurring quartz (crystalline silica). Chronic inhalation of quartz (crystalline silica) can cause silicosis (a specific form of pneumoconiosis resulting from inhalation of crystalline silica), and may also affect blood, and the liver. Chronic inhalation of quartz (crystalline silica) may cause cancer. Risk of cancer depends upon duration and level of exposure.

Sensitization: No information available.

Mutagenic Effects: No information available

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

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Bentonite	1302-78-9	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Quartz (Crystalline Silica)	14808-60-7	Group 1 (Carcinogenic to Humans)- Monograph 100C [2012] Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources Monograph 68 [1997]	A2 Suspected Human Carcinogen	Known Human Carcinogen Silica, crystalline (respirable size)	Present	Not listed	Not listed

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: Aquatic environment.
Bentonite - 1302-78-9
Freshwater Fish Species Data: 8.0-19.0 g/L LC50 Salmo gairdneri 96 h 1
19000 mg/L LC50 Oncorhynchus mykiss 96 h static 1
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	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Bentonite	1302-78-9	None	None	None	None
Quartz (Crystalline Silica)	14808-60-7	None	None	None	None

14. TRANSPORT INFORMATION

DOT
UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Class No information available
Packing group: No information available

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Emergency Response Guide Number No information available
Marine Pollutant No data available
DOT RQ (lbs): No information available
Special Provisions No Information available
Symbol(s): No information available
Description: 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
Description: 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
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

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Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Bentonite	1302-78-9	Present	Present KE-02119	Present	Not present	Present	Present	Present 215-108-5
Quartz (Crystalline Silica)	14808-60-7	Present	Present KE-29983	Present	Present (1)-548	Present	Present	Present 238-878-4

U.S. Regulations

Bentonite

FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 184.1155

FDA - 21 CFR - Total Food Additives 175.105 175.300 176.170 178.3297 184.1155

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	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Bentonite	1302-78-9	Not Listed	Not Listed	Not Listed	Not Listed
Quartz (Crystalline Silica)	14808-60-7	carcinogen (listed as Silica, crystalline (airborne particles of respirable size))	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	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
Bentonite	1302-78-9	None	None	None	None	None
Quartz (Crystalline Silica)	14808-60-7	None	None	None	None	None

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) - Health and Safety Reporting
Bentonite	1302-78-9	Not Applicable	Not Applicable
Quartz (Crystalline Silica)	14808-60-7	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

D2A Very toxic materials

Components

Bentonite

Quartz (Crystalline Silica)

WHIMHAZ

D2A

D2A In certain cases, this classification does not apply.

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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 -
Quartz (Crystalline Silica)	1 %

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Bentonite	1302-78-9	Present	Not Listed
Quartz (Crystalline Silica)	14808-60-7	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Bentonite	1302-78-9	Not listed
Quartz (Crystalline Silica)	14808-60-7	Not listed

Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Bentonite	1302-78-9	Not listed
Quartz (Crystalline Silica)	14808-60-7	Not listed

EU Classification

R-phrase(s)

not determined (not applicable)

S -phrase(s)

none

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Bentonite	1302-78-9		No information	
Quartz (Crystalline Silica)	14808-60-7		No information	

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

Indication of danger:

None.

16. OTHER INFORMATION

Preparation Date: 04/15/2015
Revision Date: 12/01/2016
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

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End of Safety Data Sheet