

DESCRIPTION

Sodium Bentonite is a naturally occurring clay mineral with high swelling capacity and excellent odorabsorbing properties, widely used in pet hygiene applications as clumping cat litter. It is non-toxic, ecofriendly, and highly absorbent.

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name Bentonite

Chemical Family Mineral

Application Cat litter (pet hygiene grade)

Manufacturer/Supplier EMCSAFE

Phone Number Telephone: +989159080794

Emergency Phone Number +989157980467

Email Info@emcsafe.com

Emergency Email Emcsafe@gmail.com

SECTION 2 — HAZARD IDENTIFICATION

Hazard ClassificationNot classified as hazardous under GHS.

May cause mild eye or respiratory irritation due to dust

Precautionary Statements

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

Sodium Bentonite (CAS No. 1302-78-9): 100% natural mineral

*Crystalline silica content is below occupational exposure limit under intended use as cat litter.

Contained Crystalline Silica (Quartz, CAS No. 14808-60-7): <1%

SECTION 4 — FIRST AID MEASURES

Inhalation

If inhaled, remove to a dust free area. Get medical attention if respiratory irritation develops or if breathing becomes difficult. Inhalation may aggravate existing respiratory illness

Eyes

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

Skin Wash with soap and water. Seek medical attention if irritation persists.

Ingestion Do Not induce vomiting. First aid measures not normally required.

Notes to Physician Treat symptomatically

SECTION 5 — FIRE FIGHTING MEASURES

Suitable Extinguishing Media Product is non-combustible. All standard firefighting media may be used.

Unsuitable Extinguishing Media None

Special Exposure Hazards

Special Protective Equipment and

Precautions for Firefighters

NFPA Ratings

None known. Product is not combustible.

None for product. Wear self-contained breathing apparatus (SCBA) and full

protective gear. Caution: slippery when wet.

Health 1, Flammability 0, Reactivity 0

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment. Avoid creating and breathing

dust. Prevent further leakage or spillage if safe to do so.

Environmental Precautionary Measures No special environmental precautions required

Procedure for Cleaning/Absorption

Prevent further leakage or spillage if safe to do so. Avoid generating dust. Collect using appropriate dustless method.

Dispose in landfill according to local, state and federal regulations.

SECTION 7 — HANDLING AND STORAGE

Handling Precautions

This product contains quartz which may become airborne. Avoid breathing dust. Avoid creating dusty conditions. Promptly clean up spills to avoid breathing airborne dust. Use only with adequate ventilation to keep exposure below recommended exposure limits. Wear a NIOSH/MSHA European Standard En 149, or equivalent certified for silica bearing dust, respirator when using this product. Material is slippery when wet.

Storage Information

Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use. Do not reuse empty container.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Substance	CAS Number	ACGIH TLV-TWA	OSHA PEL-TWA
Crystalline Silica, quartz	14808-60-7	0.025 mg/m3	10 mg/m3* %SiO2 + 2

^{*}Quartz from Bentonite was specifically excluded from the new, lower PEL in the 2016 OSHA Respirable Crystalline Silica rulemaking. More restrictive exposure limits may be enforced by some states, agencies, or other authorities.

Engineering Controls

Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits.

Personal Protective Equipment

If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

Respiratory Protection

Respiratory protection is not required for typical consumer use (e.g., pouring cat litter). For industrial-scale handling with dust generation, use NIOSH-approved respirator (N95).

Hand Protection Standard work gloves.

Skin Protection Wear clothing appropriate for the work environment.

Dusty clothing should be laundered before reuse. Use precautionary measures

to avoid creating dust when removing or laundering clothing.

Eye Protection Wear safety glasses o**r** goggles to protect against exposure.

Other Precautions None known.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State Granular solid

Color Light tan to gray (as dry powder)

Odor Odorless

pH 8-10 (5% aqueous suspension)

Specific Gravity @ 20 C (Water=1) 2.45_2.55

Density @ 20 C (lbs/gallon) ~20.4

Bulk Density @ 20 C (lbs/ft3) 60-66

Boiling Point/Range (F/C) Not applicable

Freezing Point/Range (F/C) Not applicable

Vapor Pressure @ 20 C (mmHg) Not applicable

Vapor Density (Air=1) Not applicable

Percent Volatiles Not applicable

Evaporation Rate (Butyl Acetate=1) Not applicable

Solubility in Water (g/100ml) Insoluble, forms colloidal suspension

Solubility in Solvents (g/100ml) Not applicable

VOCS (lbs/gallon) Not applicable

Viscosity, Dynamic @ 20 C (centipoise) 3.5 12.5 (6% aqueous suspension)

Viscosity, Kinematic @ 20 C (centistokes) Not applicable

Partition Coefficient/n-Octanol/Water Not applicable

Molecular Weight (g/mole) Not applicable

Flash Point/Range (F/C) Not applicable

Flash Point Method Not applicable

Autoignition Temperature (F/C) Not applicable

Flammability Limits in Air - Lower (%) Not applicable

Flammability Limits in Air - Upper (%) Not applicable

SECTION 10- STABILITY AND REACTIVITY

Reactivity Nonreactive

Chemical Stability Stable

Possibility of Hazardous Reactions Will not occur.

Conditions to Avoid None known

Incompatibility (Materials to Avoid) None known

Hazardous Decomposition Products None known

SECTION 11 TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics

Inhalation Inhaled crystalline silica in the form or quartz from occupational sources

is carcinogenic to humans (IARC, Group 1).

Skin Contact May cause skin irritation due to drying

Eye Contact May cause mechanical eye irritation.

Ingestion None known.

Aggravated Medical Conditions Individuals with respiratory disease, including but not limited

to asthma and bronchitis, or subject to eye irritation, should

not be exposed to respirable quartz-bearing dust.

Chronic Effects/Carcinogenicity

Silicosis: Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling, and sometimes-fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness, and reduced pulmonary function. This disease is exacerbated by smoking. Individuals with silicosis are predisposed to develop tuberculosis. Cancer Status: The International Agency for Research on Cancer (IARC, 1997) concludes that there is sufficient evidence in humans for carcinogenicity of inhaled crystalline silica from occupational sources (IARC Group 1), that carcinogenicity was not detected in all industrial circumstances studied and that carcinogenicity may depend on characteristics of the crystalline silica or on external factors affecting its biological activity. See IARC Monograph 68, Silica, Some Silicates and Organic Fibres (June 1997). The National Toxicology Program (NTP) classifies respirable crystalline silica as "Known to be a human carcinogen" (NTP 9th Report on Carcinogens, 2000). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (A2).

Other Information

See "Adverse Effects of Crystalline Silica Exposure" published by the American Thoracic Society Medical Section of the American Lung Association, American Journal of Respiratory and Critical Care Medicine, Volume 155, pages 761-768 (1997).

Consumer Notice: Risk of silicosis or cancer is only associated with prolonged inhalation of respirable dust during industrial processing. Normal use as cat litter poses no significant hazard.

Toxicity Tests

Oral Toxicity Not determined

Dermal ToxicityNot determined

Inhalation Toxicity Not determined

Primary Irritation Effect Not classified

Carcinogenicity Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (June 1997).

Genotoxicity Not classified

Reproductive/Developmental Toxicity Not classified

SECTION 12 - ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined

Persistence/Degradability Not determined

Bio-accumulation Not determined

Ecotoxicological Information

Acute Fish Toxicity Not determined

Acute Crustaceans Toxicity Not determined

Acute Algae Toxicity Not determined

<u>Chemical Fate Information</u> Not determined

Other Information Not applicable

SECTION 13 — DISPOSAL CONSIDERATIONS

Disposal Method If product should become a waste dispose in a licensed landfill

according to federal, state and local regulations

Contaminated PackagingRinse thoroughly before disposal. Dispose as non-hazardous waste in

compliance with local regulations.

SECTION 14 — TRANSPORT INFORMATION

DOT Not regulated as dangerous goods

Canadian TDG Not regulated as dangerous goods

ADR Not regulated as dangerous goods

Air Transportation

ICAO/IATA Not regulated as dangerous goods

Sea Transportation

IMDG Not regulated as dangerous goods

Other Transportation Information

Labels None

SECTION 15-REGULATORY INFORMATION

US Regulations

US TSCA InventoryAll components listed on inventory or are exempt.

EPA SARA Title III Extremely Hazardous Substances

Not applicable

EPA SARA (311, 312) Hazard Class Chronic Health Hazard

EPA SARA (313) ChemicalsThis product does not contain a toxic chemical for routine

annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).

EPA CERCLA/Superfund Reportable Spill Quantity

Not applicable

EPA RCRA Hazardous Waste Classification If product becomes a waste, it does NOT meet the criteria of

a hazardous waste as defined by the US EPA.

California Proposition 65

This product contains crystalline silica (quartz), a substance known to the State of California to cause cancer.

However, the risk is associated only with prolonged inhalation of respirable dust.

Canadian Regulations

Canadian DSL Inventory All components listed on inventory or are exempt.

WHMIS Hazard Class This product contains crystalline silica (respirable) and is

classified as a Class D, Division 2, Subdivision A substance.

SECTION 16 OTHER INFORMATION

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DISCLAIMER

All information presented herein is believed to be accurate; however, it is the user's responsibility to determine in advance of need that the information is current and suitable for their circumstances. No warranty or guarantee, expressed or implied is made by EMCSAFE. as to this information, or as to the safety, toxicity or effect of the use of this product.

The information and data made here in are believed to be accurate. However, considering that production may come from new mineral veins or different mines, if a more detailed analysis or a laboratory certificate is required, please specify it at the time of contract signing.

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