Safety Data Sheet

1. IDENTIFICATION

Product Identifier **PETROSET™**

Other means of identification

Synonyms Sodium montmorillonite

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

Address Fluid Tech LLC
146 Industrial Park Road
Sweetwater, TN 37874 USA

Telephone (800) 995-5691

Facsimile (800) 994-8561

Website www.fluidtechllc.com

Email address info@fluidtechllc.com

Emergency Phone (865) 809-9995

Recommended Use PETROSET™ is an absorbent used for binding, plasticizing and absorbing/solidify aqueous liquids.

Recommended Restrictions None known.

2. HAZARD(S) IDENTIFICATION

Hazard Classification: Carcinogenicity (Category 1A)
Specific Target Organ Toxicity (Repeated Exposure) (Category 1)

Signal Word: Danger

Hazard Statements: May cause cancer.
Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements

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

Response: If exposed or concerned: Get medical advice/attention.
Get medical attention/advice if you feel unwell.

Storage: Store locked up.

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

Hazards Not Otherwise Classified: May cause eye and respiratory irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	Percent
Crystalline Silica, quartz	14808-60-7	≤6%

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

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Product is non-combustible. All standard fire-fighting media may be used.

Unsuitable extinguishing Media: None.

Specific exposure hazards: None known. Product is not combustible.

Special protective equipment and precautions for firefighters: None for product. Wear self-contained breathing apparatus (SCBA) and full protective gear.

Precautions for firefighters: Caution: slippery when wet.

NFPA Ratings: Health: 1, Flammability: 0, Reactivity: 0

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

7. HANDLING AND STORAGE

Precautions for safe handling:

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.

Conditions for safe storage, including any incompatibilities:

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

Do not allow water (and moisture) to contact the product until time of use to preserve product utility.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Substances	CAS Number	ACGIH TLV-TWA	OSHA PEL-TWA*
Crystalline Silica, quartz	14808-60-7	0.025 mg/m^3	$\frac{10 \text{ mg/m}^3}{\%SiO2 + 2}$

* 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: Not normally needed. If significant exposures exceeding occupational exposure limit are possible use NIOSH/MSHA respirator approved for silica bearing dust.

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 or goggles to protect against exposure.

Other Precautions: None known.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Powdered solid.

Color: Light tan to gray as dry powder.

Odor: Odorless.

Odor threshold: Not applicable.

pH: 8 – 10 (5% aqueous solution).

Melting point/freezing point:	Not applicable.
Initial boiling point and boiling range:	Not applicable.
Flash point:	Not applicable.
Evaporation rate:	Not applicable.
Flammability (solid, gas):	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit – lower (%):	Not applicable.
Flammability limit - upper (%):	Not applicable.
Explosive limit - lower (%):	Not applicable.
Explosive limit - upper (%):	Not applicable.
Vapor pressure:	Not applicable.
Vapor density:	Not applicable.
Relative density:	Not determined.
Bulk density:	49 – 55 lbs/ft^3.
Solubility(ies):	
Solubility (water):	Insoluble, forms colloidal suspension.
Auto-ignition temperature:	Not applicable.
Decomposition temperature:	Not applicable.
Viscosity, dynamic @ 20° C:	3.5 – 12.5 (6% aqueous suspension)
Other information	
Percent volatile:	0% estimated
Specific gravity:	2.45 – 2.55

10. STABILITY AND REACTIVITY

Reactivity:	Non-reactive.
Chemical stability:	Stable.
Possibility of hazardous reactions:	Hydrofluoric acid.
Conditions to avoid:	None.
Incompatible materials:	Hydrofluoric acid.
Hazardous decomposition products:	Silica will dissolve in hydrofluoric acid and produce a corrosive gas – silicon tetrafluoride.

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 and 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).

Toxicity Tests

Oral Toxicity:	Not determined
Dermal Toxicity:	Not 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

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
Chemical Fate Information:	Not determined
Other Information:	Not applicable

13. DISPOSAL CONSIDERATIONS

Disposal Method: If product should become a waste dispose in a licensed landfill according to federal, state and local regulations.

Contaminated Packaging: Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

Land Transportation:

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

15. REGULATORY INFORMATION

US Regulations

US TSCA Inventory: All 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) Chemicals: This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).

EPA CERCLA/Superfund: Not applicable Reportable Spill Quantity

EPA RCRA Hazardous Waste: If product becomes a waste, it does NOT meet the criteria of a hazardous Classification waste as defined by the US EPA.

California Proposition 65: This product contains crystalline silica (respirable) which is a substance known to the State of California to cause cancer.

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.

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Issue date	May 15, 2015
Revision date	March 22, 2022
Version #	05

Further information:	In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However, in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibers, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards.
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