Safety Data Sheet

1. IDENTIFICATION

Product Identifier **NARCSORB™**

Other means of identification PETROSET™ blend.

Synonyms None known.

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

Address Fluid Tech LLC 146
Industrial Park Rd,
Sweetwater, TN 37874

Telephone (800) 995-5691

Facsimile (800) 994-8561

Website www.fluidtechllc.com

Email address info@fluidtechllc.com

Emergency Phone (865) 809-9995

Recommended Use NARCSORB is used as a solidification agent.

Recommended Restrictions None known.

2. HAZARD(S) IDENTIFICATION

Physical hazards May cause eye, skin and respiratory irritation.

Health hazards Breathing crystalline silica can cause lung disease, including silicosis and lung cancer.

Carcinogenicity Category 1A.

Environmental hazards Not classified.

OSHA defined hazards None.

Label elements

Pictograms

Signal words Danger

Hazard statement May cause cancer.

Precautionary statement

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.

Response If exposed or concerned: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

In case of fire: Use appropriate media to extinguish.

Storage None.

Disposal Dispose of contents/container (in accordance with

related regulations).

Hazard(s) not otherwise classified (HNOC)	Material can be slippery when wet.
Supplemental information	None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Chemical name	Common name and synonyms	CAS number	%
Quaternary Ammonium Compounds, Bis(hydrogenated Tallow Alkyl)dimethyl, Salts with Bentonite		68953-58-2	<25
Crystalline Silica, Quartz		14808-60-7	1-6

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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. In case of unconsciousness, place patient stably in the side position before transporting.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists. Take off contaminated clothing and wash before reuse.
Eye contact	Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.
Ingestion	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth unless instructed to do so by medical personnel. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Dusts may irritate the respiratory tract, skin and eyes. This product contains crystalline silica, which has been classified by IARC as (Group I) carcinogenic to humans when inhaled. Inhalation of silica can also cause a chronic lung disorder, silicosis.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. IF exposed or concerned: Get medical advice/attention. No hazards which require special first aid measures. Material can be slippery when wet.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	All standard fire-fighting media. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	The product is not combustible or flammable. Material can be slippery when wet.
Special protective equipment and precautions for firefighters	Not applicable.
Fire fighting equipment/instructions	In case of fire: Evacuate area. In case of fire and/or explosion do not breathe fumes.
NFPA Ratings	Health: 0, Flammability: 0, Reactivity: 0
General fire hazards	Material can be slippery when wet.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Avoid inhalation of dust from the spilled material. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Shovel the material into waste container. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner equipped with HEPA filter. Minimize dust generation and accumulation. Following product recovery, flush area with water. Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	No special environmental precautions required. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Do not flush into surface water. Do not let product enter drains.

7. HANDLING AND STORAGE

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. This product contains quartz which may become airborne. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Do not breathe dust from this material. Avoid contact with skin and eyes. Avoid prolonged exposure. Should be handled in closed systems, if possible. In case of insufficient ventilation, wear suitable respiratory equipment.

	Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Do not mix with other chemicals products, except as indicated by the manufacturer. Do not get in eyes, on skin or clothing. Material is slippery when wet.
Conditions for safe storage, including any incompatibilities	Avoid dust formation. Keep containers tightly closed in a dry, cool and well-ventilated place. Guard against dust accumulation of this material. Store away from incompatible materials (see Section 10 of the SDS). Keep out of the reach of children. Do not allow water to contact the product until time of use to preserve product utility.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

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

Components	Type	Value	Form
Quartz (14808-60-7)	TWA	0.025 mg/m^3	Respirable fraction.

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

Additional Components	Type	Value	Form
Nuisance dust. (CAS:N/A)	PEL	5 mg/m^3 15 mg/m^3	Respirable fraction. Total dust.
	TWA	15 mppcf 5 mg/m^3 15 mg/m^3 50 mppcf	Respirable fraction. Respirable fraction. Total dust. Total dust.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Quartz (14808-60-7)	TWA	0.05 mg/m^3	Respirable dust.

Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.
Appropriate engineering Controls	Use approved industrial general and local exhaust ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory

protection must be worn. Use only appropriately classified electrical equipment and powered industrial trucks.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields. Use tight fitting goggles if dust is generated.
Skin protection	
Hand protection	Normal work gloves.
Other	Wear suitable protective clothing. Normal work clothing (long sleeved shirts and long pants) is recommended. Dusty clothing should be laundered before reuse. Use precautionary measures to avoid creating dust when removing or laundering clothing.
Respiratory protection	Not normally needed. However, if engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
Thermal hazards	Not available.
General hygiene considerations	Do not breathe dust. When using, do not eat, drink or smoke. Avoid contact with eyes. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Powder
Physical state	Solid
Color	Light tan to gray.
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	240
Other information	
Percent volatile	0% estimated
Specific gravity	2.45 – 2.55

10. STABILITY AND REACTIVITY

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reactions known under conditions of normal use. Hazardous polymerization will not occur.
Conditions to avoid	Exposure to moisture. Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Minimize dust generation and accumulation.
Incompatible materials	Hydrofluoric acid.
Hazardous decomposition products	No dangerous reaction known under conditions of normal use. Silica will dissolve in hydrofluoric acid and produce a corrosive gas – silicon tetrafluoride.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation. Prolonged inhalation may be harmful. Inhaled crystalline silica in the form or quartz from occupational sources is carcinogenic to humans (IARC, Group 1).
Skin contact	No adverse effects due to skin contact are expected. However, the product may cause mechanical skin irritation.
Eye contact	Dust in the eyes will cause irritation.
Ingestion	None known.
Symptoms related to the physical, chemical and toxicological characteristics	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.

Information on toxicological effects

Acute toxicity	Not determined.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Dust in the eyes will cause irritation.

Respiratory or skin sensitization

Respiratory sensitization	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.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity May cause cancer. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

IARC Monographs. Overall Evaluation of Carcinogenicity
Quartz (CAS 14808-60-7) 1 Carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens
Quartz (CAS 14808-60-7) Known To Be Human Carcinogen.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity – single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (Category 1) Causes damage to lungs through prolonged/repeated exposure.

Aspiration hazard Not available.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

Overexposure to dust may result in pneumoconiosis, a respiratory disease caused by inhalation of mineral dust, which can lead to fibrotic changes to the lung tissue, or silicosis, a respiratory disease caused by inhalation of silica dust, which can lead to inflammation and fibrosis of the lung tissue.

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

12. ECOLOGICAL INFORMATION

Ecotoxicity Not expected to be harmful to aquatic organisms. The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

PETROSET™

Aquatic Components	Species	Test Results
Algae		
EC50	Selenastrum capricornutum (alga)	Not determined.
Crustacea		
EC50	Daphnia	Not determined.
NOEC	Daphnia	Not determined.
Fish		
LC50	Zebra danio (Danio rerio)	Not determined.
NOEC	Zebra danio (Danio rerio)	Not determined.

Persistence and degradability	The product contains inorganic compounds which are not biodegradable.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Not expected to be harmful to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations **Hazardous waste code**	Dispose in accordance with all applicable regulations. The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues/ unused products	Material should be recycled if possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Dispose of in accordance with local regulations. Can be landfilled, when in compliance with local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

DOT	Not regulated as dangerous goods.
Canadian TDG	Not restricted.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
Other Transportation Information	
Labels	None.

15. REGULATORY INFORMATION

US federal regulations All components are on the U.S. EPA TSCA Inventory List or are exempt.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 304 Emergency release notification
Not regulated.

SARA 311/312 Hazardous chemical
Yes.

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

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.

US state regulations

US - Massachusetts RTK - Substance: Listed substance
Quartz (CAS 14808-60-7)

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.

US. New Jersey Worker and Community Right-to-Know Act
Quartz (CAS 14808-60-7)

US. Pennsylvania Worker and Community Right-to-Know Law
Quartz (CAS 14808-60-7)

US. California Proposition 65
WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance
Quartz (CAS 14808-60-7) Listed: October 1, 1988

International Inventories

Country(s) or Region	Inventory Name	On Inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China(IECSC)	Yes

Country(s) or Region	Inventory Name	On Inventory (yes/no)*
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered bythe governing country(s) or are exempt.

Canada WHIMS 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 # 03

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 ofchemicals 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 inhumans 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 theexisting regulatory occupational exposure limits.

Occupational exposure to respirable dust and respirablecrystalline 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.

Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available. MANUFACTURER DISCLAIMER: The information given within this SDS is correct to the best of our knowledge, information and belief at the date of its revision and publication. However, the manufacturer makes no representation, warranty or guarantee as to its accuracy, reliability or completeness, nor assumes any liability for its use. It is the user's responsibility to confirm in advance that the information is current, applicable and suitable to their circumstances for each particular use. No representative of ours has authority to waive this provision. Please call for document accuracy if the revision date has exceeded 3 years.
Revision Information	Revision 1: Composition/Information on Ingredients: Ingredients Revision 2: Physical & Chemical Properties: Multiple Properties Regulatory Information: United States Hazardous Identification: Pictograms. Revision 3: Audit and format update.