

Safety Data Sheet

1. IDENTIFICATION

Product Identifier	AQUASET II™
Other means of identification	
Synonyms	Sepiolite.
Manufacturer/Importer/Supplier/Distributor Information	
Manufacturer	
Address	Fluid Tech LLC 146 Industrial Park Road Sweetwater, TN 37874
Telephone	(423) 271-6505
Facsimile	(800) 994-8561
Website	www.fluidtechllc.com
Email address	info@fluidtechllc.com
Emergency Phone	(865) 809-9995
Recommended Use	AQUASET II™ is a semi rapid-setting material used to solidify aqueous liquids.
Recommended Restrictions	None known.

2. HAZARD(S) IDENTIFICATION

Classification

Carcinogen – Category 1; Category 1A

Specific Target Organ Toxicity Single Exposure – Category 3 (Respiratory System)

Specific Target Organ Toxicity Repeat Exposure – Category 1 (Respiratory System)

Labeling:

Pictograms:



Signal Word(s): Danger

Hazard Statements:	May cause respiratory irritation. Causes damage to lungs through prolonged or repeated exposure when inhaled. May cause cancer through chronic inhalation.
Precautionary Statements:	Wash exposed skin thoroughly after handling. Do not breathe dust. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. If exposed or concerned: Get medical advice
Other Hazards:	None.
Hazard(s) not otherwise Classified (HNOC):	Material can be slippery when wet.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Hazardous Components	CAS No.	% By Weight
Sepiolite	63800-37-3	> 50*
Crystalline Silica, Quartz	14808-60-7	10-15*

*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.

Skin contact:

Wash off with soap and water. Get medical attention if irritation develops and persists.

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.

Medical attention or special treatment needed:

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

5. FIRE-FIGHTING MEASURES

Flammability of the product: Non-flammable and non-combustible.

Suitable extinguishing 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.

Special protective equipment and precautions for firefighters:

Not applicable.

NFPA Ratings

Health: 1, Flammability: 0, Reactivity: 0

General information:

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.

Methods and materials for containment and cleaning up:

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.

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.

Large Spills: Use dry methods to collect spilled materials. Evacuate area downwind of clean-up operations to minimize dust exposure.

Environmental precautions

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

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. Do not get in eyes.

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

Hazardous Component	CAS No.	PEL (OSHA) mg/m ³	TLV (ACGIH) mg/m ³
Sepiolite	63800-37-3	5 (resp) 15 (total)	10
Crystalline Silica	14808-60-7	0.1	0.025 (resp)

Appropriate Engineering Controls:

Provide ventilation adequate to maintain PELs.

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:** Wear gloves of adequate length to offer appropriate skin protection from splashes.
 - 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

- Physical state:** Powder
- Color:** Light tan to gray or reddish tan.
- Odor:** Earthy odor.
- Odor threshold:** Not applicable.
- pH:** 4 – 8 @ 25 °C
- Melting point/freezing point:** Not applicable.
- Initial boiling point and boiling range:** Not applicable.
- Flash point:** Product is not self-igniting.
- Evaporation rate:** Not applicable.
- Flammability (solid, gas):** Non-flammable.

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:	Not determined.

Solubility(ies)

Solubility (water):	Insoluble
Auto-ignition temperature:	Not applicable.
Decomposition temperature:	Not applicable.
Viscosity, dynamic @ 20 C:	Not applicable.

Other information

Percent volatile:	0% estimated
Specific gravity:	1.9 – 2.4

10. STABILITY AND REACTIVITY

Reactivity:	Normally stable.
Chemical stability:	Chemically stable.
Possibility of hazardous reactions:	No dangerous reactions known under conditions of normal use.
Conditions to avoid:	Contact with incompatible materials. Exposure to moisture. 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
Exposure Routes

Inhalation	Inhalation of dusts may cause respiratory irritation. Prolonged inhalation may be harmful. Inhaled crystalline silica in the form of 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 irritation: Prolonged skin contact may cause temporary irritation.
Serious eye damage or 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: Sepiolite is not listed by MSHA, OSHA, or IARC as a carcinogen, but this product contains crystalline silica, which has been classified by IARC as (Group I) carcinogenic to humans when inhaled.

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: None.

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.

Persistence & degradability: The product contains inorganic compounds which are not biodegradable.

Bio accumulative potential: This material shows no bioaccumulation effect or food chain concentration toxicity.

Mobility in soil: Minimal mobility in soil.

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.

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: If this product as supplied, and unmixed, becomes a waste, it will not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act.

Hazardous waste code: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.



Waste from residues and unused product:

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 any label warnings even after container is emptied.

14. TRANSPORT INFORMATION

DOT	Not regulated.
Canadian TDG	Not restricted.
IATA	Not regulated.
IMDG	Not regulated.
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 - Listed substance:	Quartz (CAS 14808-60-7)
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

Canada WHIMS Hazard Class This product contains crystalline silica (respirable) and is classified as a Class D, Division 2, Subdivision A substance.



Specific State Regulations: Consult State and Local authorities for guidance. Components found in this product may contain trace amounts of inherent naturally occurring elements (such as, but not limited to arsenic and cadmium) that may be regulated under California Proposition 65 and other States regulations.

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

Issue date:	May 15, 2015
Revision date:	November 29, 2022
Version #:	05
Further information:	<p>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.)</p> <p>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)</p> <p>According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits.</p> <p>Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.</p> <p>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.</p>



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 Info: Revision 1: Composition/Information on Ingredients: Ingredients; Physical & Chemical Properties; Multiple Properties
Revision 2: Regulatory Information: United States
Revision 3: Hazardous Identification; Pictograms; Address change
Revision 4: Updated Ingredients; Physical & Chemical Properties. Modified SDS format for readability.
Revision 5: Updated to correct erroneous references to AQUASET II-H.