SOLUBLE FIBER

1 DESCRIPTION

Soluble Fiber is a high-temperature body low bio-persistence fiber that utilizes a unique spinning technology to create a special fiber with superior thermal and mechanical properties. This fiber is made from a blend of calcium, silica, and magnesium and can be exposed to temperatures up to 2192°F.

2 APPLICATIONS

Soluble Fiber is intended for use in removable insulation, cable trays, batteries, expansion joints, ovens, process furnace linings, structural steel fire protection, fire barriers, and more.

3 ADVANTAGES

The unique properties of Soluble Fiber make it flexible, lightweight, inorganic, thermal shock, chemical attack, and corrosion resistant with a low level of thermal conductivity and high tensile strength for low heat storage. Soluble Fiber is also a cost-effective alternative to refractory ceramic fiber for applications to 2200°F. Soluble fiber also has excellent sound absorption, is high heat-reflective, and is easy to fabricate and install.

4 PROPERTY DATA

Characteristics:	**Method:**	**English Values:**	**Metric Values:**
Thickness	ASTM-D-1777	1" +/- 10%	25.4 mm +/- 10%
Temperature Resistance	N/A	Max: 2200°F Operating: 2000°F	Max: 1200°C Operating: 1100°C
Linear Shrinkage	2000°F/24 hrs	0-1.5%	
Specific Heat	(Btu/lbs/F)	0.27	
Color:	N/A	White	

SOLUBLE FIBER

1 PRODUCT & COMPANY IDENTIFICATION

Product Identifier: TTT-SOLF-25, TTT-SOLF-12
Common Name: Soluble Fiber
SDS Number:
Revision Date: 05/04/2022
Suplier Details: Thermal Tech & Temp Inc.
880 North Madison Street
Crown Point, Indiana 46307
Contact: Thermal Tech & Temp Inc. Office
Phone: 1.800.674.9284
Email: info@thermaltechtemp.com
sales@thermaltechtemp.com
Website: www.thermaltechtemp.com

2 HAZARDS IDENTIFICATION

Classification of Substance:
GHS Classification In Accordance with 29 CFR 1910 (OSHA HCS):
Not classified. Read the entire safety data sheet.

GHS Label Elements, Including Precautionary Statements:
GHS Signal Word: None.
GHS Hazard Pictograms: None.
GHS Hazard Statements: None.
GHS Precautionary Statements: None.

Hazards not Otherwise Classified (HNOC) or not covered by GHS:
Mild mechanical irritation to skin, eyes and upper respiratory system may result from exposure. These effects are usually temporary.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Ingredients		
CAS #	**%**	**Chemical Name**
436083-99-7	**100%**	**Alkaline-earth silicate wool**

Alkaline-earth silicate wool: (CAS 436083-99-7)
Exposure Limits: Alkaline earth silicate wool (AES) consists of silica (55-80 wt %), calcium and magnesia (25-45 wt %), alumina, titania, and zirconia (less than 6 wt %), and trace oxides.

4 FIRST AID MEASURES

Inhalation: If respiratory tract irritation develops, move the person to a dust-free location. If nose and throat become irritated move to a dust-free area, drink water, and blow nose. If symptoms persist, seek medical advice.

Skin Contact: Handling of this material may cause mild mechanical temporary skin irritation. If this occurs, rinse affected areas with water and wash gently. Do not rub or scratch exposed skin. If symptoms persist, seek medical advice.

Eye Contact: In case of eye contact, flush abundantly with water; have eyewash available. Do not rub your eyes. If symptoms persist, seek medical advice.

Ingestion: Not applicable.

5 FIRE FIGHTING MEASURES

Flash Point (Method Used): >250 C by TOC Flammable Limits

Extinguishing Media: Use an extinguishing agent suitable for surrounding combustible materials.

Special Fire Fighting Procedures: N/A

Unusual Fire and Explosion Hazards: Packaging and surrounding material may be combustible.

6 ACCIDENTAL RELEASE MEASURES

Minimize airborne dust. Compressed air or dry sweeping should not be used for cleaning. Frequently clean the work area with HEPA filtered vacuum or wet sweeping to minimize the accumulation of debris. Do not use compressed air for clean-up.

7 HANDLING AND STORAGE

Handling Precautions: Handle fiber carefully to minimize airborne dust. Limit use of power tools unless in conjunction with local exhaust ventilation. Use hand tools whenever possible.

Storage Requirements: Store in a manner to minimize airborne dust. Product packaging may contain residue. Do not reuse.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use engineering controls such as local exhaust ventilation, point of generation dust collection, downdraft work stations, emission controlling tool designs, and materials handling equipment designed to minimize airborne fiber emissions.

Personal Protective Equipment: Skin protection: Wear personal protective equipment (e.g. gloves), as necessary to prevent skin irritation. Washable or disposable clothing may be used. If possible, do not take unwashed clothing home. If soiled work clothing must be taken home, employees should be informed on best practices to minimize non-work dust exposure.

Eye protection: As necessary, wear goggles or safety glasses with side shields.

Respiratory Protection: Use of appropriate respiratory protection, pursuant to the requirements of OSHA Standards 29 CFR 1 91 0.1 34 and 29 CFR 1 926.1 03, is recommended. A NIOSH-certified respirator with a filter efficiency of at least 95% should be used.

Also refer to health and safety information on the HTIW Coalition website: www.HTIWCoalition.org

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White material with a wool type appear-
Physical States:	ance
Specific Gravity or Density:	Solid
Boiling Point:	2.6
Vapor Pressure	N/A
Potential Hydrogenii:	N/A
Odor:	N/A
Solubility:	No odor
Freezing or Melting Point:	Less than 1 mg/liter
Vapor Density:	2300°F
	N/A

10 STABILITY AND REACTIVITY

Chemical Stability:	Stable and inert as supplied
Conditions to Avoldentification:	Please refer to handling and storage advice in section 7
Materials to Avoldentification:	None.
Hazardous Decomposition:	None.
Hazardous Polymerization:	None.

11 TOXICOLOGICAL INFORMATION

Like all man-made mineral fibers and some natural fibers, fibers contained in this product can produce a mild mechanical irritation resulting in temporary itching or rarely, in some sensitive individuals, in a slight temporary reddening. Unlike other irritant reactions, this is not the result of allergy or chemical skin damage but is caused by mechanical effects. Fibers contained in the title have been designed to be rapidly cleared from lung tissue. This low biopersistence has been confirmed in many studies on AES using EU protocol ECB/TM/27(rev 7). When inhaled, even at very high doses, they do not accumulate to any level capable of producing a serious adverse biological effect. In lifetime chronic studies there was no exposure-related effect more than would be seen with any “inert” dust. Subchronic studies at the highest doses achievable produced at worst a transient mild inflammatory response. Fibers with the same ability to persist in tissue do not produce tumors when injected into the peritoneal cavity of rats.

12 ECOLOGICAL INFORMATION

No adverse effects of this material on the environment are anticipated.

13 DISPOSAL CONSIDERATIONS

Under U.S. Federal regulations, it is the waste generator’s responsibility to properly characterize a waste material, to determine if it is a “hazardous” waste. Check local, regional, state or provincial regulations to identify all applicable disposal requirements.

14 TRANSPORT INFORMATION

None special required.

15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Alkaline-earth silicate wool (436083-99-7) [100%] - N/A

Regulatory CODE Descriptions

All compounds are listed or exempt

16 OTHER INFORMATION

Disclaimer:

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).