

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY	Product Name: Spongy Elastic Aerogel SEA75-MR Synonyms: Silica Aerogel Use of the Substance/Preparation: High performance insulation material Manufacturer: Phoenix-Surowce Sp. z o.o. Address: ul. Kasztanowa 18, 05-816 Michałowice Wies, Poland, EU E-mail: biuro@phoenix-aerogel.pl Web-site: https://phoenix-aerogel.pl			
2. PRODUCT DESCRIPTION AND PROPERTIES	Product highlights: <u>SEA75+MR is aerogel elastic mat reinforced with non-woven mat it is thermally insulative material that can be used in a variety of end-use insulation application.</u> <u>SEA75+MR aerogel is reinforced with non-woven mat made of polyester and have ~3mm height and 90 g/m² weight.</u> <u>Additionally SEA75 is also high sound absorbing material, and is hydrophobic.</u> <u>This aerogel mat is suitable for use in high performance insulation systems, clothing, cars, special equipment, space, and other thermal insulations.</u> <u>Typical thickness: # 3mm, # 5 mm, # 10 mm.</u>			
	Pore diameter		<100 nm	
	Thermal conductivity λ*		~0,026 W/m·K	
	Porosity		>93%	
	Bulk density		180-200 kg/m3	
	Surface chemistry		Hydrophobic	
	Applicable temperature range		-250 ÷ +100 °C -328 ÷ 212 °F	
	CAS		681-84-5	
	Performance benefits: - Hydrophobic/water repellent - UV stabile - Good sound absorption - Low density - Inert * - As of SEA75+MR mat reinforced.			
	3. HAZARDS IDENTIFICATION	Appearance and Odor: White, sponge-like material without characteristic smell. Emergency Overview: Inhalation of excessive amounts of dust from the product may cause irritation to the respiratory tract. Dermal contact may cause irritation.		
POTENTIAL HEALTH EFFECTS				
Inhalation: Inhalation of airborne dusts may cause irritation of the upper respiratory tract.				
Eye Contact: Exposure to dust from this product can produce a drying sensation and irritation of the eyes.				
Skin Contact: Skin contact with dust from this product can produce a drying sensation and irritation of the skin.				
Ingestion: This material is not intended to be ingested. If ingested in large quantity, the material may produce irritation and blockage.				
Acute Health Hazards: Dust from this product is a physical irritant, and may cause temporary irritation or scratchiness of the throat and / or itching of the eyes and skin.				
Chronic Health Hazards: Some studies of long term amorphous silica dust exposures indicate a potential for decreased lung function. In surveyed studies, this effect is characterized as compounded by smoking. Additionally, surveyed studies characterize the decreased lung function effect as reversible on discontinuation of exposure.				
CARCINOGENICITY This product is composed of synthetic amorphous methylated silica dioxide. Amorphous silica should not to be confused with crystalline silica. Epidemiological studies indicate low potential for adverse health effects from exposure to amorphous silica.				
4. COMPOSITION / INFORMATION ON INGREDIENTS		Chemical Name	Amount (weight)	Amount (volume)
	Methylated Silica	>50%	>90%	681-84-5

5. FIRST AID MEASURES	Eye Contact: Immediately wash with large amounts of water for at least 15 minutes, occasionally lifting lids. If irritation occurs and persists, get medical treatment. Skin Contact: Wash skin thoroughly with soap and plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Obtain medical attention if symptoms occur. Ingestion: This material is not intended to be ingested. If ingested in large quantity, the material may produce irritation and blockage. Inhalation: Remove to fresh air. Drink water to clear throat and blow nose to remove dust. Obtain medical attention if ill effects persist.
6. FIRE-FIGHTING MEASURES	Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Hazardous combustion products: No data available. Treat material as having potential for emission of toxic gases upon combustion. Special protective equipment for firefighting: Wear self-contained breathing apparatus for firefighting if necessary
7. ACCIDENTAL RELEASE MEASURES	Personal Precautions: Minimize dust generation. Ensure adequate ventilation. Use personal protective equipment as necessary. Environmental Precautions: Material is not soluble. Do not flush into surface water or sanitary sewer system. Methods for Cleaning up: Contain and collect released material for proper disposal.
8. HANDLING AND STORAGE	Handling: Aerogel could generate small amount of dust when handled. Workplace exposure to all dusts should be controlled with standard industrial hygiene practices. Local exhaust ventilation should be the primary dust control method. Dust released during the handling of Phoenix-M1 mat should be cleaned up promptly. Aerogel dust is hydrophobic, water is not effective as a dust control agent. Storage: Aerogel mat should be kept in their packaging until they are ready to be used. Unpack the material in the work area. This will help to minimize the area where dust exposure may occur.
9. TOXICOLOGICAL INFORMATION	No radioactive or toxic materials. Repeated or prolonged contact may lead to removal of natural fats from the skin, resulting in non-allergic dermatitis and absorption through the skin. Splashes in eyes may cause irritation and reversible local damage. Ingestion may result in sore throat, abdominal pain or nausea. Inhalation of dust must be avoided; continuous high concentration dust can cause damage at lungs.
10. ECOLOGICAL INFORMATION	As it does not contain soluble heavy metals, the product does not cause ecological or toxicological problems like other compounds containing heavy metals. It should not be allowed to enter drains or watercourses.
11. DISPOSAL CONSIDERATIONS	Do not allow entering drains and watercourses or anywhere that may affect ground or surface waters. Dispose in an approved landfill in accordance with federal, state / provincial, and local regulation. Cover promptly to avoid dust generation.
12. TRANSPORT INFORMATION	To transport within the user's premises, always use closed containers that are secure and upright. Ensure that operational personnel know what to do in event of spillage. It is not hazardous in the sense of the transport regulations. Not restricted under IATA.
13. REGULATORY INFORMATION	The products are determined as not being dangerous for supply according to current Chemicals Hazard Information and Packing Regulations in force. The information contained in this Material Safety Data Sheet, does not substitute the user's own responsibility to carry out an assessment of work place risks as may be required by Health and Safety Legislation
14. OTHER INFORMATION	The products should not be used for purposes other than those shown on the manufacturer's product labels and technical data sheets. As the specific conditions of use are outside the supplier's control; the user is responsible for ensuring compliance with the relevant legislation in the territory of use. The information contained in this Material Safety Data Sheet, is based on the current state of knowledge and current state of Legislation. It provides guidance on Health Safety and Environmental aspects of the products, and should not be taken as a guarantee of technical performance or suitability for particular applications.