



MATERIAL SAFETY DATA SHEET (MSDS)

Product: **ThermoSafe Insulated Shipper-VIP**
Date: **02-26-2008**

SECTION I Identification and Description

Company: **ThermoSafe Brands**,
a part of Tegrant Corporation
Address: 3930 Ventura Drive, Suite 450
Arlington Heights, Illinois 60004

Contact: Elizabeth Nichols, Product Manager
Phone: 847-632-9648
Fax: 847-632-0653
E-mail: beth.nichols@tegrant.com

SECTION II Chemical Product and Manufacturer Identification

Manufacturer: **NanoPore Inc.**
Address: 2501 Alamo Ave. SE
Albuquerque, NM 87106 USA
Phone: +1 505-247-4041
Fax: +1 505-247-4046

Trade Name: NanoPore™ HP-150
Product Type: Silicon Dioxide
Carbon Black
Material Uses: Used for thermal insulation

SECTION III Composition/Information on Ingredients

Substance Trivial Name: NanoPore™ HP-150		Formal Name: Proprietary Silicon Dioxide Carbon Mixture	Chemical Family: Mixture
Component: Synthetic Amorphous Silicon Dioxide Carbon Black Proprietary Fibers	Chemical Formula: SiO ₂ and C	CAS No.: 112945-52-5 (Specific Silica) 7631-86-9 (General Silica) 1333-86-4 (Carbon Black) Proprietary	% by Weight: Silicon Dioxide – 75-95% Carbon Black – 5-25% <5%

SECTION IV Hazards Identification

Main Hazards:

The physical hazards of this substance have not been fully evaluated and care should be taken when handling the product. Some grades of carbon black may be electrically conductive and dust may be fine enough to penetrate electrical boxes unless tightly sealed. Some grades may be combustible. Fire may not be visible in powder.

Potential Health Hazards:

Eye: May cause irritation or abrasions at high dust levels.

Skin: May cause drying of skin.

Ingestions: Unknown. Based on composition, none expected.

Inhalation: Temporary discomfort due to inhalation of dust concentrations above the industry standards.

Chronic (cancer Info): Experimental blend. Carbon black has been evaluated by IARC as possibly carcinogenic to humans (Group 25). Refer to section ii for further information.

Teratology: None identified.

Reproduction Info.: None identified.

Target Organs: None identified.

SECTION V First Aid Measures

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms persist, seek medical attention.

Ingestion: No adverse effects expected. If swallowed, do not induce vomiting. Rinse mouth with water. Symptomatic treatment is recommended. Seek medical attention in event of large quantity ingestion.

Eyes: Immediately flush lightly with plenty of water for at least 15 minutes. If symptoms develop, seek medical attention.

Skin: No adverse effects expected. Wash with soap and water.

SECTION VI Fire Fighting Measures

Extinguishing Media: Water fog or foam. Use to cool below ignition point and/or exclude air	Unsuitable Media: Water stream	Flash Point: Mixture: Unknown 500°C	Flash Point Method: Pensky-martin Closed Cup (carbon black)
Lower Explosive Limit: Mixture: Unknown 122 g/m ³ (carbon black)	Upper Explosive Limit: Not Applicable	Ignition in Air: Mixture: Unknown Above 315°C (carbon black)	
Flammability Classification: Carbon black: Combustible solid		Flame Propagation in Air: Very slow burning solid (carbon black)	
Fire Fighting Procedure: Normal fog nozzle water application and/or exclusion of air		Combustion Hazards: Carbon monoxide (CO) and carbon dioxide (CO ₂)	
Protective Equipment: Standard personal protective equipment for structural firefighting		Unusual Fire Hazards: Unknown. See section IV.	
Dust Explosion Potential: Unknown. Carbon black may create explosive mixture with air at high dust concentration.			
Sensitivity to Impact: Not Applicable		Static Charge Effects: Material can build up static electrical charges when subjected to friction. See section IV.	

SECTION VII Accidental Release Measures**Personal Precautions:**

Wear Goggles if release creates conditions where eye contact is probable. If airborne dust concentrations exceed the applicable exposure limit, then an approved respirator for dust mists is recommended.

Spill Cleanup Measures:

Spills may be collected, preferably by vacuum, and placed in suitable container for disposal.

Environmental Precautions:

Material is not a hazardous waste. Dispose of in landfills or by incineration in accordance with international, national, U.S., federal and local laws and regulations.

SECTION VIII Handling and Storage**Handling and Storage Precautions:**

Handling: Ventilate work area if necessary. Take precautionary measures against possible build-up of electrostatic charge. Assess manual handling of bagged product; take suitable precautions.

Storage: Product should be stored dry and away from volatile chemicals.

Hygienic Practices:

Spills may be collected, preferably by vacuum, and placed in suitable container for disposal.

Special Precautions:

Material is not a hazardous waste. Dispose of in landfills or by incineration in accordance with international, national, U.S., federal and local laws and regulations.

SECTION IX Exposure Controls/Personal Protection**Inhalation Standards:****Silica**TLV (U.S.) = 10 mg/m³ total dust for particles not otherwise classified

PEL (U.S.) = Not applicable

Carbon BlackTLV (U.S.) = 3.5 mg/m³ TWA 8hr/day, 40 hr/weekPEL (U.S.) = 3.5 mg/m³ TWA 8hr/day, 40 hr/week**Eye-Face Protection:**

Safety glasses with side shields or goggles recommended to prevent eye contact.

Skin Protection:

Drying may occur. Barrier cream application prior to skin exposure may assist in the removal of silica from the skin.

Protective Clothing:

None required.

Respiratory Protection:

Approved dust/mist respirator recommended for concentrations above applicable exposure limit.

Engineering Controls:

Use general or local exhaust ventilation to meet exposure limit requirements.

Other Protective Measures:

Wash exposed skin frequently. Good practices should be followed in regard to work clothing.

SECTION X Physical and Chemical Properties

Physical State: Solid powder wrapped in plastic	Color: Black	Odor: None
Odor Threshold: Not Applicable	pH: Not Applicable	Boiling Point: Not Applicable
Evaporation Rate: Not Applicable	Melting/Freezing Point: Not Applicable	% Volatile by Volume: Unknown
Solubility in Water: Insoluble in cold and hot water	Specific Gravity: 1.7-2.2 g/cm ³	Vapor Density: Not Applicable
Vapor Pressure: Not Applicable	Reid Vapor Pressure: Not Applicable	Water/Oil Distribution: Not Applicable
Viscosity: Not Applicable	Pour Point: Not Applicable	

SECTION XI Stability and Reactivity

Chemical Stability: Stable	Conditions to Avoid: Carbon black: contact with strong oxidizers. Excessive heat or flame.	Incompatible Materials: Carbon black: strong oxidizers
Reactivity: Carbon black may react exothermically upon contact with strong oxidizers.	Hazardous Decomposition: Carbon black releases carbon monoxide (CO) and carbon dioxide (CO ₂) when burning. Plastic wrap may release noxious fumes when burned.	Hazardous Polymers: None

SECTION XII Toxicological Information

Routes of Exposure: Inhalation, eye and skin contact.	Acute Inhalation Effect: Temporary discomfort due to inhalation of dust concentrations above exposure limits.	Acute Ingestion Effect: None expected.
Acute Eye Effect: May cause irritation at high dust levels.	Acute Skin Effect: May cause drying of skin.	
Chronic Inhalation Effect: Human Studies: In its Monograph Volume 65, issued in April 1996, the International Agency for Research on Cancer (IARC) reevaluated carbon black and concluded that —there is <i>inadequate evidence</i> in humans for the carcinogenicity of carbon black.“ Monograph Volume 42, issued in 1987, the International Agency for Research on Cancer (IARC) evaluated amorphous silica and concluded that —there is <i>inadequate evidence</i> in humans for the carcinogenicity of amorphous silica.“ Animal Toxicity Studies: Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed, for long periods of time, to excessive concentrations of carbon black and several other insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hamster) under similar circumstances and study conditions. Many researchers conducting rat inhalation studies believe that these effects most likely result from the massive accumulation of small dust particles in the lung which overwhelm the natural lung clearance mechanisms, known as the —lung overload“ phenomenon, rather than from a specific chemical effect of the dust particles in the lung. Amorphous silica was not used in these research studies.		
Chronic Ingestion: Effect None expected.	Chronic Eye Effect: None expected.	Chronic Skin Effect: None expected.

SECTION XII Continued**Sensitization to Material:**

None expected.

Medical Conditions:

Aggravated Dermatitis.

Synergistic Materials:

None expected.

Mutagenicity:

None known.

Reproductive Toxicity:

None known.

Teratogenicity:

None known.

Carcinogenicity:

Carbon black (IARC 2B)–possibly carcinogenic.

LD50 for Material:

Toxicological studies have not been conducted.

LC50 for Material:

Toxicological studies have not been conducted.

SECTION XIII Ecological Information**Mobility:**

Not soluble in water, not mobile in soil.

Persistence/Degradability:

Not Applicable

Bio-Accumulation:

Not Applicable

Ecotoxicity:

WGK Water Hazard Class: 0, KBwS-classification.

SECTION XIV Disposal Considerations

Legal Classification Dispose of in accordance with European, federal, state and local laws and regulations. As sold, not defined as a hazardous waste under U.S. RCRA (Resource Conservation and Recovery Act) regulations. Container Disposal Return reusable containers to manufacturer, incinerate or recycle bags.

SECTION XV Transport Information**UN Number:**

Not classified

UN Proper Shipping Name:

Not classified

UN Class:

Not classified

UN Packing Group:

Not classified

GGVS/GGVE/RID/ADR/IMDG-Code/ICAO-TI Information:

Not hazardous

US Rail Regulations:

Not classified

SECTION XVI Regulatory Information

This material should only be handled by properly trained personnel familiar with its physical and chemical characteristics.

EINECS Registration Numbers of Components:

Amorphous Silica: 2315454

Carbon Black: 2156099

All of the components of this product are either exempt or listed under EINECS.

SECTION XVII**Other Information****Label Text:**

CAUTION: Dust may irritation to the eyes and respiratory tract.

AVOID BREATHING DUST: Use engineering controls to reduce dust levels where feasible. Wear approved respirator if necessary to prevent exposures above 3.5 mg/m³.

FIRST AID: Flush irritated eyes with water. For respiratory irritation, remove victim to fresh air. Wash exposed skin daily with mild soap and water.

STORAGE: Store in a cool dry place. See MSDS for additional information.

Revision Indicator:

This is a reformatted original version of this format MSDS. Revised sections of the MSDS will be indicated by an asterisk (*) in front of the section affected.

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