MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	CLAY, FIRECLAY, SUPERDUTY FIRECLAY
UN Number	No UN Number Allocated
Product Type:	Hydrous Aluminum Silicates
Company Name	Snow Shoe Refractories, LLC
And Address:	895 Clarence Rd.; PO Box 276
	Snow Shoe, PA 16874
Technical Contact:	Phone #: 1-814-387-6811
	24hr. Emergency Assistance (CHEMTREC) 1-800-424-9300
Emergency	Outside the Continental U.S. See Section 15 or
Contact:	Call Chemtrec Collect: 703-527-3887

2. **COMPOSITION / INFORMATION ON INGREDIENTS**

Substance	%	Identification No.	Exposure Limits
	Range		U.S.A
Clay	100	CAS 1302-78-9	Nuisance Particulate
			ACGIH TLV:TWA (resp.) 5mg/m ³
			OSHA PEL:TWA (resp.) 5mg/m ³
Crystalline Silica,	10-30	CAS 14808-60-7	ACGIH TLV:TWA (resp.) 0.05mg/m ³
Quartz			OSHA PEL:TWA (resp.) 10mg/m ³ ÷ (%SiO ₂ +2)

3. HAZARD IDENTIFICATION

Emergency Overview:	Product is a dry brownish mixture of coarse to fine particles. Not a fire or spill hazard. Some risk by inhalation.	
Precautions:	Pre-existing lung conditions such as, but not limited to bronchitis, emphysema and asthma.	
Chronic Health Effects:	Prolonged inhalation of product may lead to the development of a disabling pulmonary fibrosis known as silicosis, which may lead to cancer.	
Acute Health Effects:	Eyes: Corrosive and physical eye irritant Skin: Slight skin irritation Inhalation: irritation of upper respiratory system Ingestion: May cause gastrointestinal disturbances	

4. FIRST AID MEASURES

Inhalation:	Remove victim to fresh air. If not breathing, give artificial respiration and seek medical attention.
Eye contact:	Flush eyes with large amounts of water. Seek medical attention if irritation persists.
Skin contact:	Wash affected area with mild soap and water.
Ingestion:	Seek medical attention if symptoms persist.

5. FIRE FIGHTING MEASURES

Extinguisher Type:	No special instructions or conditions.
Special Procedures:	No special instructions other than use of approved respirators. Product is not a combustible. No hazardous decomposition products.

6. ACCIDENTAL RELEASE

Spillage:	No special requirements. Minimize dust levels. Use safety glasses, gloves, skin, and respiratory
opmage	protection.

7. HANDLING AND STORAGE

Handling	No special requirements. Minimize dust levels. Use safety glasses, gloves, skin, and respiratory protection.
Storage	Same as handling requirements.

EXPOSURE CONTROLS AND PERSONAL PROTECTION 8.

Ventilation:	Provide sufficient ventilation, in both volume and air flow patterns, to control any mist/particulate emissions below allowable limits. See Exposure Limits in Section 2
Respiratory:	Provide workers with legally approved respirators for level of exposure incurred.
Eye:	The use of proper eye protection is recommended (ex. safety glasses).
Hand:	The use of proper hand protection is recommended (ex. barrier cream with anti-slip gloves).
Other:	Safety shoes and long sleeve shirts is recommended for foot and skin protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: A dry brownish mixture of fine materials; odorless.

Boiling Point:	Not Applicable
Melting Point:	>2375°F (1300°C)
Bulk Density:	135
% Volatile by Volume:	0
Evaporation Rate:	Not applicable
Water Solubility:	0
pH (10% aqueous slurry):	4-7
Specific Gravity (g/cc):	2.59

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Incompatibility	None
Hazardous Decomposition	None

11. TOXICOLOGICAL INFORMATION

Substance & CAS Number	Carcinogenic Data	Summary of Hazards
Clay (CAS 1302-76-7)	No Data Found	Respiratory: Nuisance Particulate
Quartz (CAS 14808-60-7)	IARC Group 1	Respiratory: May Develop Silicosis

12. ECOLOGICAL INFORMATION

No Data Available

13. DISPOSAL INFORMATION

This product, as manufactured, does not exhibit any characteristics of a hazardous waste. It is suitable for landfill disposal. However, debris generated during installation, maintenance or tear-out procedures may be contaminated with other hazardous materials. Therefore, appropriate waste analysis may be necessary to determine proper disposal. Waste characterisation and disposal/treatment methods should be determined by a qualified environmental professional in accordance with applicable federal (country specific), state, and local regulations (laws).

14. TRANSPORTATION INFORMATION

This product is not classified as a hazardous material for transportation. No hazard class, no label or placard required, no UN or NA number assigned. Shipment outside the U.S. should be reviewed by a environmental professional for country specific regulatory requirements.

15. **REGULATORY INFORMATION**

Products or components of mixture regulated under the following
U.S.A Regulations:
Sara Title III: (302/304) No; (311/312) Yes; (313) No
CERCLA (RQ): No
TSCA: Yes (All Substances listed in ingredients)
California Proposition 65: Yes (Silica)
HMIS Codes: Health: 2 Fire: 0 Reactivity: 0 Protection: E
Canadian Regulations:
Domestic Substance List (DSL): Yes (All Substances Listed)
WHMIS Class: D2A
Contact Phone # 905-732-4441

16. OTHER INFORMATION

ACRONYMS AND REFERENCES USED IN PREPARATION OF MSDS':

ACKONTING AND REFERENCES USED IN PREPARATION OF MISDS.	
ACGIH:	American Conference of Governmental Industrial Hygienists
CAS#:	Stands forChemicalAbstractsService
CERCLA:	Comprehensive Environmental Response, Compensation & Liability Act
IARC:	International Agency for Research on Cancer
Group 1:	Carcinogenic to Humans. (IARC)
Group 2A:	Probably Carcinogenic to Humans. (IARC)
Group 2B:	Possibly Carcinogenic to Humans. (IARC)
Group 3:	Unclassifiable as to Carcinogenicity in Humans. (IARC)
Group 4:	Probably not Carcinogenic to Humans. (IARC)
HMIS:	Hazardous Materials Identification (National Paint and Coatings Association)
mg/m ³ :	Milligrams per cubic meter
OSHA:	Occupational Safety and Health Administration
PEL:	Permissible Exposure Limit (OSHA)
SARA:	Superfund Amendments and Reauthorization Act
TITLE III:	Emergency Planning and Community Right To Know Act
Section 302	2: Extremely Hazardous Substances
Section 304	E Emergency Release
Section 311	1: Community Right-to-Know, MSDSs or List of Chemicals
Section 312	2: Community Right-to-Know, Inventories & Locations, (Tier I/Tier II)
Section 313	3: Toxic Chemicals, Toxic Chemical Release Reporting, Form R

TLV: Threshold Limit Values (ACGIH) TWA: Time Weighted Average

REFERENCES:

Sax, N. Irving: Dangerous Properties of Industrial Materials, Ninth Edition, Van Nostrand Reinhold Co., Inc., 1996.

Kirk, R. and Othmer, D., Encyclopedia of Chemical Technology, Third Edition, Wiley-Interscience, New York, NY 1982.

Clansky, K.B., <u>Suspect Chemicals Sourcebook</u>, 1992-2 Edition, Roytech Publications, Bethesda, Maryland.

Sax, N.Irving and Lewis, R.J. <u>Hawley's Condensed Chemical Dictionary</u>, Eleventh Ed., Van Nostrand Reinhold Co., Inc., NY Manufacturers/Suppliers, <u>Material Safety Data Sheets on Raw Materials Used</u>

American National Standard for Hazardous Industrial Chemicals - <u>Material Safety DataSheets - Preparation</u>, American National Standards Institute, Inc.11 West 42nd St, New York, NY 10036.

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