



MATERIAL SAFETY DATA SHEET

Effective Date February 7, 2003
MSDS Number M38

Section 1 – Product and Company Information

Product Name: HiDry Bags (Tyvek)

Product Use: Desiccant, absorbent

Grades: 4A molecular sieve

Synonyms: Synthetic zeolite

Company: Multisorb Technologies, Inc.

Street Address: 325 Harlem Road

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Section 2 – Composition / Information on Ingredients

Component Name	CAS Number	% by Weight
4A Molecular sieve	Unlisted	85 - 95
Polyethylene fiber	9002-88-4	1 - 10

Molecular sieve is not CAS listed but all of the ingredients of molecular sieve are listed with CAS numbers.

While this material is not classified as hazardous under OSHA regulations, this MSDS contains valuable information critical to the safe handling and proper use of this product. This MSDS should be retained and available for employees and other users of this product.

Section 3 – Hazard Identification

Emergency Overview: A white packet containing a tan bead material. This product is not combustible. When first wetted this product can heat up to the boiling point of water. Flooding with water will reduce the temperature.

Potential Health Effects:

Eyes: None

Skin: None

Ingestion: Ingestion is unlikely but if ingested, blockage may occur. Get medical attention.

Inhalation: None

Medical Effects Generally Aggravated by Exposure: None

Chronic Effects/Carcinogenicity: None

Section 8 – Exposure Controls/Personal Protection

Engineering Controls: Not required.

Respiratory Protection: Not required.

Skin Protection: Light gloves will protect against abrasion and drying of the skin.

Eye Protection: Not required.

Component Name	Exposure Limits		
	OSHA PEL	ACGIH TLV	Other Recommended Limits
Sodium oxide	Not applicable	Not applicable	Not applicable
Magnesium oxide	TWA 15 mg / m ³ (fume, total particulate)	TWA 10 mg / m ³ (fume)	IDLH 750 mg / m ³
Aluminum oxide	TWA 15 mg / m ³ (total dust as aluminum) TWA 5 mg / m ³ (respirable dust)	TWA 10 mg / m ³ (total particulate matter)	Not applicable
Silicon oxide	TWA 15 mg / m ³ (total dust as silicon) TWA 5 mg / m ³ (respirable dust as silicon)	10 mm / m ³ (as silicon)	TWA 10 mg / m ³ (total dust as silicon) TWA 5 mg / m ³ (respirable dust as silicon)
Quartz	TWA 250 mppcf / (SiO ₂ + 5) (crystalline quartz respirable) TWA 10 mg / m ³ / (SiO ₂ + 2) (crystalline quartz respirable) TWA 30 mg / m ³ / (SiO ₂ + 2)	TWA .05 mg / m ³ (respirable dust)	NIOSH REL Ca TWA .05 mg / m ³ IDLH Ca TWA .05 mg / m ³ (Quartz)

Section 9 – Physical and Chemical Properties

Appearance: White packets

Odor: None

Physical State: White packets

PH: Not applicable

Vapor Pressure: Not applicable

Vapor Density: Not applicable

Boiling Point: Not applicable

Melting Point: Not applicable

Solubility: Insoluble in water

Specific Gravity: 2.1

Section 10 – Stability and Reactivity

Stability: Stable

Conditions to avoid: Moisture and high humidity environments.

Incompatibility: Water, acids

Hazardous Decomposition Products: None

Hazardous Polymerization: Will not occur

Section 11 – Toxicological Information

The following toxicological information refers to the content of the packet. In normal use there is no exposure to the contents.

Animal Toxicology

LD₅₀ / oral / rat = > 32,000 mg / kg*

LD₅₀ / dermal / rabbit = > 2,000 mg / kg*

LC₅₀ / inhalation / rat = No data available

Chronic toxicity Classification of ingredients

EC Carcinogenic Not listed

EC Mutagenic Not listed

EC Toxic for Reproduction Not listed

Carcinogenity (ACGIH) A4 (Aluminum oxide)
A2 (Quartz)

IARC classification Group 3 (Silicon oxide)
Group 1 (Quartz)

Routes of exposure Exposure may occur via inhalation, contact with the skin and eyes.

Irritation Not available

Skin (rabbit) Not classified as a skin irritant in animal testing.*

Eye (rabbit) Moderate eye irritation.*

Additional product information * The toxicological data has been taken from products of similar composition.

Additional component information No data available.

Section 12 – Ecological Information

Not known to have any adverse effect on the aquatic environment. Molecular sieve is insoluble & non-toxic.

Section 13 – Disposal Information

Disposal Information If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Materials of a hazardous nature that contact the product during normal use may be retained on the product. The user of the product must identify the hazards associated with the retained material in order to assess the waste disposal options. Dispose according to federal, state and local regulations.

Section 14 – Transportation Information

Proper shipping name Not applicable

UN - No. Not applicable

Packaging Group Not applicable

U. S. Dot Not regulated

Dot Shipping Name Not applicable

Hazard classification Not applicable

IMO Not regulated

EmS Not applicable

MFAG Not applicable

Maritime pollutant No

ICAO - IATA Not regulated

Instruction passenger Not applicable

Instruction cargo Not applicable

Further information Not classified as hazardous or dangerous in the meaning of transportation regulations.

Section 15 – Regulatory Information (Not meant to be all inclusive - selected regulations represented)

The following regulatory information refers to the contents of the product. In normal use there is no exposure to the contents.

TSCA Listed: All of the ingredients of this mixture are on the TSCA substance inventory.

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act) Reportable Quantity None of the component(s) of this product are subject to the release reporting under 40 CFR 302 when release exceeds the reportable quantity (RQ).

SARA Title III (Superfund Amendments and Reauthorization Act of 1986)

Section 302 (Extremely Hazardous Substances) None of the components of this product are subject to The emergency planning provisions of 40 CFR 355 when the amounts are equal to or greater than the Threshold Planning Quantity (TPQ).

Section 313 (Toxic Chemicals) None of the components of this product have been specified as Toxic

Chemicals under SARA Section 313 and are not subject to the Toxic Release Inventory reporting requirements under 40 CFR 372.

The following components are listed in the U.S. State Regulations.

California - Proposition 65 Crystalline silica

Massachusetts Right-to-Know Aluminum oxide, quartz

New Jersey Right to-Know Silica, aluminum oxide, magnesium oxide, silica (quartz)

Pennsylvania Right-to-Know Silica, Aluminum oxide, magnesium oxide, quartz

OSHA PEL - Molecular sieve is not listed. See section 8 for the ingredients.

NIOSH Molecular sieve is not listed. See section 8 for the ingredients.

ACGIH Molecular sieve is not listed. See section 8 for the ingredients.

USDA Not applicable

FDA Not applicable

Canadian Hazardous Products Act This product is classified as a material causing other toxic effects. Carcinogenity - Class D, Division 2, Subdivision A, under Regulations pursuant to the Federal Hazardous Products Act.

Canadian Environmental Protection Act All ingredients of this mixture are notified to CEPA and on The DSL (Domestic Substances List).

European Inventory of Existing Commercial Chemical Substances All components of this product Are included in EINECS/ELINCS.

Council of European Communities Directive on Classification, Packaging and Labeling of Dangerous Substances / Preparation (67/548EEC & 88/379/EEC) No dangerous goods label required.

Section 16 – Other Information

HMIS – Hazardous Materials Identification System

HMIS Rating	
Health	0
Flammability	0
Reactivity	0

0 - minimal hazard, 1 - slight hazard, 2 – moderate hazard, 3 - serious hazard, 4 - severe hazard

This MSDS was prepared by: George E. Mckedy
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This data and recommendations presented in this data sheet concerning the use of our product and the materials contained therein are believed to be correct but does not purport to be all inclusive and shall be used only as a guide. However, the customer should determine the suitability of such materials for his purpose before adopting them on a commercial scale. Since the use of our products is beyond our control, no guarantee, expressed or implied, is made and no responsibility assumed for the use of this material or the results to be obtained therefrom. Information on this form is furnished for the purpose of compliance with Government Health and Safety Regulations and shall not be used for any other purposes. Moreover, the recommendations contained in this data sheet are not to be construed as a license to operate under, or a recommendation to infringe, any existing patents, nor should they be confused with state, municipal or insurance requirements, or with national safety codes.