MULTISORB Technologies

SAFETY DATA SHEET

EFFECTIVE DATE:	May 29, 2015
SDS NUMBER:	M45

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Name: **MiniPax®**

Product Use: Moisture Absorbent
Grades: Silica gel, non-indicating suitable for direct contact with food and pharmaceuticals
Synonyms: Desiccant

Company: Multisorb Technologies
Address: 325 Harlem Road
Buffalo, NY 14224-1893 USA
Telephone Number: (716) 824 8900 [USA] Monday - Friday (8:00 - 5:00 EDT)
Fax Number: (716) 824 4091 [USA]
Website / E-Mail : www.multisorb.com

SECTION 2 – HAZARD IDENTIFICATION

Emergency Overview:
A white polyethylene packet containing a white to clear granular material that poses little or no immediate hazard. There is no exposure to the contents of the packet. The silica gel is not combustible, but the polyethylene packet is combustible. Not a hazardous substance or mixture according to the Global Harmonized System (GHS).

GHS classification of the substance or mixture: Not a hazardous substance or mixture

GHS label elements, including precautionary statements: Not a hazardous substance or mixture

Hazardous not otherwise classified (HNOC) or not covered by GHS: None

Potential Health Effects:

Eyes: None

Skin: None

Ingestion: Ingestion is unlikely, however, could cause blockage if it occurs. Get medical attention.

Inhalation: None

Medical Effects Generally Aggravated by Exposure: None

Chronic Effects/Carcinogenicity: None

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT NAME	CAS NUMBER	% BY WEIGHT	EC #	ANNEX #
A sealed, polyethylene packet containing silica gel	-	100% for the combination	-	-
Synthetic amorphous precipitated silica gel (SiO2)	112926-00-8	85 - 95%	231-545-4	Not Listed
High density polyethylene fiber	9002-88-4	5 - 15%	Not Listed	Not Listed
While this material is not classified as hazardous under GHS regulations, this SDS contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.				

SECTION 4 – FIRST AID MEASURES

The following does not apply to the packet, but applies if the packet is cut open and the person is exposed to the contents.

Eyes: Rinse eyes well with water while lifting the eye lids. If irritation persists, consult a physician.

Skin: Wash affected area with soap and water.

Ingestion: Ingestion is unlikely, however, could cause blockage if it occurs. Get medical attention.

Inhalation: Not applicable

Notes to Physician: Not applicable

SECTION 5 – FIRE FIGHTING MEASURES

Flammable Properties: Not flammable

Flash Point: Not applicable **Method:** Not applicable

Flammable Limits: Not flammable

- **Lower Flammability Limit:** Not applicable
- **Upper Flammability Limit:** Not applicable

Auto-ignition Temperature: Not applicable

Hazardous Combustion Products: Not applicable

Extinguishing Media: Use extinguishing media that is appropriate for the surrounding fire. Silica gel is not combustible, but the polyethylene packet is combustible.

Fire Fighting Instructions: Silica gel is not combustible, but the polyethylene packet is combustible.

Unusual Fire and Explosion Hazards: None

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill: Sweep or vacuum up and place the spilled material in a waste disposal container. Wash with soap and water after handling. Refer to Section 8 for personal protective equipment.

SECTION 7 – HANDLING AND STORAGE

Handling: Minimize contact between the worker and the material.
Practice good hygienic work practices.

Storage: Store in a cool, dry location. Keep in sealed containers away from moisture.
Silica gel will readily adsorb moisture.

Incompatibility: Water, fluorine, oxygen difluoride, chlorine trifluoride

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Not applicable

Respiratory Protection: Not applicable

Skin Protection: Not applicable

Eye Protection: Not applicable

EXPOSURE LIMITS			
COMPONENT NAME	**OSHA PEL**	**ACGIH TLV**	**OTHER RECOMMENDED LIMITS**
A sealed, polyethylene packet containing silica gel	Not Applicable	Not Applicable	Not Applicable

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	White packet containing granular material	**VAPOR DENSITY:**	Not applicable
ODOR:	None	**BOILING POINT:**	Not applicable
PHYSICAL STATE:	Solid granule	**MELTING POINT:**	135° C (275° F)*
PH:	Not applicable	**SOLUBILITY:**	Insoluble in water
VAPOR PRESSURE:	Not applicable	**SPECIFIC GRAVITY:**	Not applicable
FLAMMABLE:	Not applicable	**AUTO-IGNITION POINT:**	Not applicable
FLASH POINT:	Not applicable	**FLAMMABLE LIMITS:**	Not applicable
ODOR THRESHOLD:	None	**EVAPORATION RATE:**	Not applicable
PARTITION COEFFICIENT N-OCTANOL / WATER:	Not applicable	**DECOMPOSITION TEMPERATURE:**	Not known
VISCOSITY:	Not applicable	*Polyethylene	

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable

Conditions to avoid: Moisture and high humidity environments will reduce the desiccating capacity.

Incompatibility: Water, fluorine, oxygen difluoride, chlorine trifluoride

Hazardous Decomposition Products: None

Hazardous Polymerization: Will not occur

Reactivity: None

SECTION 11 – TOXICOLOGICAL INFORMATION

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

This product and its components are not listed on the IARC, NTP or OSHA Carcinogen lists.

IARC: Amorphous silica gel IARC - 3 (Unclassifiable as to Carcinogenicity in Humans)

Animal Toxicology: Tests for DOT Hazard classification
(Tests Conducted on finely ground silica gel)

1 - hour LC50 (rat) > 2 mg / l
48 - hour oral LD50 (rat) est. > 31,600 mg / kg
48 - hour dermal LD50 (rabbit) est. > 2,000 mg / kg
Considered an ocular irritant

Tests for FDA approval of silica gel for use in foods: LD50 (mice) 8,000 mg / kg (limit of test)
LD50 (rats) 4,500 mg / kg (limit of test)
6 months - feeding tests (rats) at levels up to 10 % of the diet produced no effects.

Human Toxicology: Silica gel is a synthetic amorphous silica not to be confused with crystalline silica. Epidemiological studies indicate low potential for adverse health effects. In the activated form, silica gel acts as a desiccant and can cause a drying irritation of the mucous membranes and skin in cases of severe exposure. Multisorb Technologies knows of no medical conditions that are abnormally aggravated by exposure to silica gel.

SECTION 12 – ECOLOGICAL INFORMATION

Environmental: Not hazardous

Ecotoxicity: *Freshwater Algae Data 72 hour EC50 Selenastrum capricomutum: 440mg / L
* Freshwater Fish Species Data 96 hour LC50Brachydanio rerio: 5,000 mg / L (static)
* Water Flea Data 48 hour EC50 Ceriodaphnia: 7,600 mg / L

*Silica, amorphous

Persistence and degradability: Not available

Bioaccumulative potential: Not available

Mobility in soil: Not available

Other adverse effects: Not available

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 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, provincial and local regulations.

SECTION 14 – TRANSPORTATION INFORMATION

U.S. Department of Transportation Shipping Name: Not classified as a hazardous material. Not regulated. Non dangerous per IATA-DG regulations.

SECTION 15 – REGULATORY INFORMATION *(NOT MEANT TO BE ALL INCLUSIVE - SELECTED REGULATIONS REPRESENTED)*

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

TSCA Listed: Yes

OSHA: See section 8

NIOSH: See section 8
Animal tests conducted in 1976 - 1978. 18 month exposure at 15 mg / m^3 showed silica deposition in respiratory macrophages and lymph nodes, minimum lung impairment, no silicosis.

EPA: This product contains no toxic chemicals in excess of the applicable de minimis concentration as specified under 313 of Title III SARA.

ACGIH: See section 8

Food Chemical Codex: Silica gel is approved for functional use in foods.

USDA: Silica gel has been cleared for certain uses in salt and seasonings, and in cured mixtures for meat and poultry products.

FDA: Silica gel has been cleared for certain uses in foods per 21 CFR 160.105, 160.185 and 172.480.

DOT: Not classified as a hazardous material.

SECTION 16 – OTHER INFORMATION

HMIS – HAZARDOUS MATERIALS IDENTIFICATION SYSTEM

HMIS RATING	
Health:	1
Flammability:	0
Physical:	0

The HMIS rating information is intended solely for the use of individuals trained in the HMIS rating system.

The NPCA specifically recommends that preparers of SDS should not place HMIS PPE designation codes on the SDS or labels that leave the facility as it is not known the conditions under which the customer will use this product.

Date of Preparation: May 29, 2015

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 there from. 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.