

MATERIAL SAFETY DATA SHEET

Product: Superabsorbent Polymer / Snow Polymer

No. 2500—28—0—01E January 2, 2012

01-IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

PRODUCT NAME: Superabsorbent Sodium Polyacrylate Polymer

SUPPLIER: Educational Innovations, Inc., 5 Francis J. Clarke Circle, Bethel CT 06801-2845 USA

(203) 229-0730 Fax (203) 229-0740

02-COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name: Acrylic Acid Polymer, Sodium Salt (greater than 90% by weight)

CAS No. 9003-04-7

Water (less than 10% by weight)

7732-18-5

03-HAZARDS IDENTIFICATION

MOST IMPORTANT HAZARDS: None

PHYSICAL & CHEMICAL HAZARDS:

In the presence of an ignition source dust can form an explosive mixture with air.

During thermal decomposition, toxic by-products can be released.

04-FIRST-AID MEASURES

SKIN CONTACTS Flush skin immediately with water.

EYE CONTACT Immediately flush eyes with water and seek medical attention.

INHALATION Remove to fresh air. Rinse with gargles or approved saline solution and seek medical attention.

INGESTION Rinse mouth with water. Induce vomiting and seek medical attention.

05-FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Water spray

Dry powder

Carbon dioxide (CO₂)

Foam

SPECIFIC HAZARDS In the presence of an ignition source, dust can form explosive mixture with air in an enclosed space. At temperature above 200 degrees C, thermal decomposition giving toxic products; organic derivatives, carbon oxides, can occur.

SPECIAL PROTECTIVE EQUIPMENT

FOR FIREFIGHTERS Wear protective clothing, safety goggles and self-contained breathing apparatus.

06-ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTION Avoid contact with skin and eyes.

Prohibit inhalation of dust.

ENVIRONMENTAL PROTECTION Do not release into the environment.

Do not let the product enter into drains.

METHOD FOR CLEANING UP

Recovery Sweep or vacuum spilled product. Do not rinse with water. Product is slippery when wet.

Disposal Destroy by incineration or landfill in accordance with local regulations.

07-HANDLING AND STORAGE

HANDLING PRECAUTIONS: Storage and handling precautions applicable to products;

Dust could form an explosive mixture with air in the presence of an ignition source.

Ensure appropriate exhaust and ventilation at machinery and at places where dust can be generated. (Do not permanently recycle unfiltered air).

Avoid dust formation.

Avoid accumulation of static charges.

Avoid spillage on the floor, product becomes slippery when wet.

STORAGE CONDITIONS: Keep container tightly closed.

Store protected from moisture.

Keep away from heat and sources of ignition.

Provide electrical grounding of equipment and electrical equipment usable in explosive atmosphere.

PACKING MATERIALS: Paper bags lined with polyethylene or polypropylene film

08-EXPOSURE CONTROLS / PERSONAL PROTECTION

PROTECTIVE PROVISIONS Ensure sufficient air exchange and / or exhaust in work areas. (Do not permanently recycle unfiltered air)

CONTROL PARAMETERS

Exposure limits Value recommended by EDANA: VME=0.05mg/m³ (respirable dust) (<10µm)

PERSONAL PROTECTION EQUIPMENT RECOMMENDATIONS:

Respiratory Effective dust mask

Hand Gloves

Eye Safety glasses / goggles

Skin and body Long sleeved shirts & non-skid boots

Hygiene measures Avoid contact with skin and eyes. Wash hands and exposed skin

Prohibit inhalation of dust.

09-PHYSICAL AND CHEMICAL PROPERTIES

Appearance White granular powder

Bulk Density 0.62 to 0.74 g/ml

Decomposition Point ca.330 degrees C

Solubility in H₂O Swells in water

Auto-ignition Temperature Above 400 degrees C

10-STABILITY AND REACTIVITY

CONDITIONS TO AVOID Store protected from moisture.

Keep away from heat and sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS

Temperature above 200 degrees C, Thermal decomposition giving toxic products; organic vapors, carbon monoxide

FURTHER INFORMATION Polymer swells in presence of water.

11-TOXICOLOGICAL INFORMATION

Corrosiveness none 1)

Acute Toxicity Oral rat LD50: 2,000 mg/kg 1)

Skin Irritation Not an irritant (Human, Rabbit) 1)

Eye Irritation Not an irritant (Rabbit) 1)

Vaginal Mucosal Irritation Not an irritant (Dog) 1)

Ames Mutagenicity Test Non-mutagenic 1)

Skin contact sensitization Non-sensitizing (Rat) 1)

Symptoms of Exposure Dust may cause eye, nasal, or bronchial irritation.

Cytotoxicity Non-cytotoxicity (L929 cell)

12- ECOLOGICAL INFORMATION

PERSISTENCE / DEGRADABILITY

In water Not readily biodegradable: 0% after 28 days

ECOTOXICITY

AQUATIC TOXICITY

ACUTE TOXICITY

13- DISPOSAL CONSIDERATION

DISPOSAL OF PRODUCT: Destroy the product by incineration.

14- TRANSPORT INFORMATION

ADR / RID Not regulated

IMDG Not regulated

IATA Not regulated

15- REGULATORY INFORMATION

EEC DIRECTIVE

SAFETY DATA D.91/155/EEC amended by D.93/112/EEC: Dangerous substance and preparations.

EC CLASSIFICATION / LABELLING

DANGEROUS PREPARATIONS D.88/379/EEC amended by D.93/18/EEC (3rdATP)

Not classified as dangerous.

INVENTORIES

TSCA(USA): Conforms, not listed

EINECS(EC) : Conforms

ENCS(Japan) : Conforms

CEPA (Canada) All substances are listed under the DSL or not required listed

WHMIS (Canada) Not a controlled product under this directive

16- OTHER INFORMATION

RECOMMENDED USE: Superabsorbent polymers

Aqueous fluid absorbent

REFERENCE 1) Data of contracted outside laboratory

Regulatory information regarding the use of this substance in a given country is the responsibility of the user. This information relates to the specific material(s) listed. It may not be valid for the material(s) if used in combination with other materials or in any process. It is the user's responsibility to satisfy himself as to the suitability and completeness of this information for his own particular use.