SAFETY DATA SHEET: May be used to comply with OSHA’s Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

PRODUCT NAME: SAP Cubes (Super Absorbent Polymer)

SECTION I SUPPLIER’S INFORMATION

M² Polymer Technologies, Inc.
P.O. Box 365
West Dundee, IL 60118
Telephone Number for Information: 847/836-1393
Last Update: November 11, 2015

SECTION II COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components (Specific Chemical Identity: Common Name(s)) OSHA PEL ACGIH TLV % (optional)
1. 2-propenoic acid polymer, crosslinked w/ sodium 2-propenoate NE NE 95%
   CAS Number: 9033-79-8
2. Water, deionized or distilled 5%

SECTION III HAZARDS IDENTIFICATION

Hazardous Components NONE
Physical & Chemical Hazards If ground to fine, dust particles, an ignition source can form an explosive mixture with air. During thermal decomposition, toxic by-products can be released.

SECTION IV FIRST AID MEASURES

Skin Contact Flush skin immediately with water if irritation occurs.
Eye Contact Immediately flush eyes with water and seek medical attention if irritation persists.
Inhalation Remove to fresh air. Due to the large particle size, SAP Spheres are not an inhalation hazard.
Ingestion Rinse mouth with water. If gastric discomfort is felt, then seek medical attention.

SECTION V FIRE FIGHTING MEASURES

Suitable Extinguishing Media Water Spray or Dry Powder or Carbon Dioxide (CO2) or Foam
Specific Hazards At temperatures above 200° C, thermal decomposition giving toxic products can occur.
Special Protective Equipment For Firefighters Wear protective clothing, safety goggles and self-contained breathing apparatus.

SECTION VI ACCIDENTAL RELEASE MEASURES

Respiratory Protection (Specify Type) - Where dusty conditions are created, use a suitable, nuisance-type mask.
Ventilation - Local Exhaust Ensure removal of airborne particles.
Protective Gloves - Recommended. Eye Protection - Safety goggles
Work/Hygienic Practices - Wash thoroughly after handling.

Dispose of spilled material in accordance with local, State and Federal regulations for non-hazardous chemical waste.
SECTION VII  HANDLING & STORAGE

Handling Precautions: Avoid dust formation.
Avoid spillage of floor. Product becomes slippery when wet.

Storage Conditions: Store in original container, and protected from moisture.
Avoid exposure to open flames or temperatures above 200° C.

SECTION VIII  EXPOSURE CONTROLS / PERSONAL PROTECTION

Protective Provisions: Ensure sufficient air exchange and/or exhaust in work areas.

Exposure Limits: Recommended by EDANA: VME = 0.05 mg/m³ (respirable dust < 10 µm)
Note: SAP Spheres contain < 0.05% of particles < 10 µm in size.

Personal Protection:
Respiratory: Effective Dust Mask
Hand: Gloves
Eyes: Safety glasses
Skin & Body: Non-Skid Boots
Hygiene: Avoid inhalation of dust.

SECTION IX  PHYSICAL & CHEMICAL PROPERTIES

Appearance: Opaque, clear to yellowish amorphous spheres (in dry state)
Clear to opaque spheres with a gelatinous texture (in hydrated state)

Bulk Density:
- 4 mm Spheres: 0.80 to 0.90 g/cc
- 2.5 mm Spheres: 0.80 to 0.90 g/cc
- 1.5 mm Spheres: 0.80 to 0.90 g/cc

Decomposition Point: Approx. 400° C

Solubility in H₂O: Insoluble. Absorbs water and swells.
Auto-ignition Temperature: Above 400° C

SECTION X  STABILITY & REACTIVITY

Conditions To Avoid: Store protected from moisture
Keep away from high heat and open flames.

Hazardous Decomposition Products: Above 200° C thermal decomposition can cause toxic product and carbon monoxide to form.

Further Information: Polymer swells in the presence of water.

SECTION XI  TOXICOLOGICAL INFORMATION

Corrosiveness: None
Acute Toxicity: Oral rat LD50: 2,000 mg/kg
Skin Irritation: Not an irritant
Eye Irritation: Not an irritant
Vaginal Mucosal Irritation: Not tested
Ames Mutagenicity Test: Non-mutagenic
Skin contact sensitization: Non-sensitizing
Symptoms of Exposure: Dust may cause eye, nasal or bronchial irritation
Cytotoxicity: Non-cytotoxicity

SECTION XII  ECOLOGICAL INFORMATION

Persistence/Degradability: In water Not readily biodegradable.
Ecotoxicity: None
Aquatic Toxicity: None
Acute Toxicity: None
SECTION XIII  DISPOSAL CONSIDERATION

Dispose of product in accordance with local, State and Federal regulations for non-hazardous chemical waste.

SECTION XIV  TRANSPORT INFORMATION

ADR / RID  Not regulated
IMDG  Not regulated
IATA  Not regulated
USDOT  Freight Class 55. Non-hazardous goods.

SECTION XV  REGULATORY INFORMATION

EC Classification / Labeling  Not classified as dangerous.
D.88/379/EEC amended by D.93/18/EEC (3rd ATP)

Inventories  TSCA (USA)  CONFORMS
EINECS (EU)  CONFORMS
ENCS (JAPAN)  CONFORMS
CEPA (CANADA)  CONFORMS
WHMIS (CANADA)  CONFORMS

SECTION XVI  OTHER INFORMATION

Recommended Use  Superabsorbent polymers
Aqueous fluid absorbent

Regulatory information regarding the use of this substance in a given country is the responsibility of the user. The information in this document relates to the specific material listed. It may not be valid for the material 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.