



M² Polymer Technologies, Inc.

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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.

EFFECTIVE DATE: April 1, 2015

SECTION I CHEMICAL PRODUCT & SUPPLIER'S IDENTIFICATION

Product Name: AGSAP[®] PAM (Particle Size S, M or L)
Chemical Name: Also sold labeled as "Cool Tie Water Crystals"
Super Absorbent Polymer
Potassium Co-polymer of Acrylic-Acrylamide Crosslinked

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P.O. Box 365
West Dundee, IL 60118

Telephone Number for Information: 847/836-1393
Last Update : April 1, 2015

SECTION II HAZARD IDENTIFICATION

Emergency Overview

Potassium Co-polymer of Acrylic-Acrylamide Crosslinked is a white, granular, odorless polymer that forms a gel-like material with water. It is insoluble in water and causes slippery conditions when wet. Although not regulated as a hazardous material, the respirable dust is a potential respiratory tract irritant.

Potential Health Effects - Eyes

Dust may cause burning, drying, itching and other discomfort resulting in reddening of the eyes.

Potential Health Effects - Skin

Dust exposure, such as in manufacturing, may aggravate existing skin conditions due to drying.

Potential Health Effects - Ingestion

Not a likely route of entry. Tests show that super absorbent polymers are non-toxic if ingested. However, as in the instance of any non-food consumption, seek medical attention in the event of any adverse symptoms.

Potential Health Effects - Inhalation

Respirable dust exposure may cause respiratory tract & lung irritation and may aggravate existing respiratory conditions.

HMIS Ratings: Health 1 Fire 1 Reactivity 0

Hazard Scale: 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe *=Chronic Hazard

SECTION III COMPOSITION / INGREDIENT INFORMATION

CAS #	Component	Percent
31212-13-2	Potassium Co-polymer of Acrylic-Acrylamide Crosslinked	> 97 %
7732-18-5	Water	< 3 %

Component Information/Information on Non-Hazardous Components

The components of this product are not regulated as hazardous under 29 CFR and 49 CFR. However, the manufacturer recognizes the potential for respiratory tract irritation as a result of inhalation of this material as a respirable dust. See Sections 8, 11, 14 and 15 for further information.

SECTION IV FIRST AID MEASURES

First Aid - Eyes

Immediately flush eyes with water for at least 15 minutes.

First Aid - Skin

Remove polyacrylate absorbent dust from skin using soap and water.

First Aid - Ingestion

Non-toxic. However, if adverse symptoms appear, seek medical attention.

First Aid - Inhalation

If inhaled, move to source of fresh air. Seek medical attention if symptoms persist.

SECTION V FIRE FIGHTING MEASURES

General Fire Hazards

No recognized fire hazards associated with the product.

Upper Flammable Limit (UFL):	NE
Lower Flammable Limit (LFL):	NE
Method Used:	None
Flash Point:	None
Flammability Classification:	None

Hazardous Combustion Products

None known.

Extinguishing Media

Water. Water spray. Dry chemical, foam, carbon dioxide. Slippery conditions are created if spilled product comes in contact with water.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self contained breathing apparatus,

NFPA Ratings: Health=1 Fire=1 Reactivity=0

Hazard Scale: 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

SECTION VI ACCIDENTAL RELEASE MEASURES

Containment Procedures

No special precautions required. Sweep or vacuum material when possible and shovel into a waste container.

Clean Up Procedures

Use caution if product comes in contact with water as slippery conditions may result. Waste residual may be flushed down a drain with water for normal wastewater treatment. This is a non-hazardous waste suitable for disposal in any approved solid waste landfill.

Evacuation Procedures

None required.

Special Procedures

Avoid respirable dust. Wear a nuisance style dust mask if dusty conditions occur.

SECTION VII HANDLING AND STORAGE

Handling Procedures

Handle as an eye and respiratory tract irritant.

Storage Procedures

Store in a dry, closed container.

SECTION VIII EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines**Occupational Exposure Limits**

None.

Engineering Controls

Provide local exhaust ventilation if dusting occurs.

Personal Protective Equipment – Eyes & Face

Safety glasses with side shields or goggles.

Personal Protective Equipment – Skin

Use impervious gloves when handling the product in a manufacturing environment.

Personal Protective Equipment – Respiratory

Wear a nuisance style dust mask for mild dusty conditions where concentration of total dust is more than 10 mg/m³.

Personal Protective Equipment – General

Follow normal safety precautions and maintain good housekeeping. Wash thoroughly after handling.

SECTION IX PHYSICAL & CHEMICAL PROPERTIES

Appearance:	White or off-white granular powder	Odor:	None
Physical State:	Solid	pH:	5 to 8 (at 5 g/liter in water)
Vapor Pressure:	Not applicable.	Vapor Density:	Not applicable.
Boiling Point:	Not applicable.	Melting Point:	> 390°F (> 199° C)
Solubility (H₂O):	Not soluble	Bulk Density:	0.5 to 0.9 g/cc

SECTION X CHEMICAL STABILITY & REACTIVITY INFORMATION

Chemical Stability

Product is stable. Hazardous polymerization does not occur.

Chemical Stability: Conditions to Avoid

Strong oxidizing agents which may cause exothermic reactions. Strong acids.

Incompatibility

None

Hazardous Decomposition

Thermal decomposition may produce nitrogen oxides (NO_x), carbon oxides (CO_x) and Hydrogen Cyanide.

Hazardous Polymerization

None

SECTION XI TOXICOLOGICAL INFORMATION

General Product Information

Acute inhalation of respirable dust may cause irritation of upper respiratory tract and lungs.

Acute Toxicity – LD50/LC50

Oral: LD50/oral/rat > 5000 mg/kg

Dermal: LD50/dermal/rat > 5000 mg/kg

Inhalation: The product is not expected to be toxic by inhalation.

Irritation

Skin: Not irritating.

Eyes: Not irritating.

Carcinogenicity

None

Chronic Toxicity

No chronic effects.

Mutagenicity

Not mutagenic

SECTION XII ECOLOGICAL INFORMATION

Aquatic toxicity:

Toxicity to fish: LC50/Danio rerio/96 hours > 100 mg/L (OECD 203)

Toxicity to daphnia: EC50/Daphnia magna/48 hours > 100 mg/L (OECD 202)

Toxicity to algae: IC50/Scenedesmus subspicatus/72 hours > 100 mg/L (OECD 201)

Environmental Fate

Super absorbent polymers are largely inert in aerobic and anaerobic conditions and not readily biodegradable. Does not bioaccumulate. They are immobile in landfills and soils systems with the mobile fraction showing biodegradability. They are also compatible with incineration of municipal solid waste. Incidental drain disposal of small quantities of polyacrylate absorbents will not affect the performance of wastewater treatment systems.

SECTION XIII DISPOSAL CONSIDERATIONS

US EPA Waste Number & Descriptions**General Product Information**

Product is non-hazardous waste material suitable for approved solid waste landfills.

Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components

Disposal Instructions

Dispose of in accordance with Local, State and Federal regulations.

SECTION XIV**TRANSPORTATION INFORMATION**

International Transportation Regulations

The product is not transport regulated.
Not classified as dangerous according to DOT or IMO/IMDG or ICAO/IATA regulations.

SECTION XV**REGULATORY INFORMATION**

U.S. SARA Reporting Requirements: None.

RCRA Status: Not RCRA hazardous.

General Product Information

The product is not Federally regulated as a hazardous material.

California Proposition 65 Information:

WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm (Acrylamide).

International Inventories:

USA (TSCA): All components of this product are either listed on the inventory or are exempt from listing.

China (IECSC): All components of this product are either listed on the inventory or are exempt from listing.

European Union (REACH): All components of this product have been registered or pre-registered with the European Chemicals Agency or are exempt from registration.

Australia (AICS): All components of this product are either listed on the inventory or are exempt from listing.

Japan (ENCS): All components of this product are either listed on the inventory or are exempt from listing.

Korea (ECL): Status not yet confirmed. For R&D purposes only.

Taiwan (CSNN): All components of this product are either listed on the inventory or are exempt from listing.

New Zealand (NZIoC): All components of this product are either listed on the inventory or are exempt from listing.

SECTION XVI**OTHER INFORMATION**

Other Information

The information presented in this document is presented in good faith and is believed to be accurate as to the effective date given. However, no warranty, expressed or implied is given. It is the buy's responsibility to ensure that its activities comply with Federal, State or provincial and local laws.

NFPA:

Health:	1
Flammability:	1
Instability:	0

HMIS:

Health:	1
Flammability:	1
Physical Hazard:	0
PPE Code:	B