

## Material Safety Data Sheet

Identity: **Water Management Polymers**

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### *Section I -- Hazardous Ingredients/Identity Information*

**Hazardous Components** Specific Chemical Identity

Chemical Nature: Acrylamide and potassium acrylate copolymer; (cross-linked, anionic)

CAS No.: 31212-13-2

Free acrylamide may be present in amounts not exceeding 0.01% dry wt.

Nuisance Dust	OSHA PEL	ACGIH TLV	Other*
Respirable (TWA)	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>
Total (TWA)	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	

\*PHC recommended inhalation exposure limit guideline for respirable polyacrylate dust <10 micron particle size. See also Section VI.

D.O.T. Hazard Class: Not a DOT/IMO Hazardous Material.

HMIS Ratings: Health 2, Flammability 1, Reactivity 0, Protection B.

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### *Section II -- Physical/Chemical Characteristics*

<b>Boiling Point:</b>	Not established	<b>Melting Point:</b>	>390 F
<b>Vapor Pressure:</b>	<10 mm Hg	<b>Evaporation Rate:</b>	Less than 1 (Butyl acetate = 1)
<b>Vapor Density:</b>	Nil	<b>Polymer Attributes:</b>	Cross-linked, Anionic
<b>Solubility in Water:</b>	insoluble; swells in water		
<b>Appearance and Odor:</b>	clear to yellow crystals; no odor		

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### *Section III -- Fire and Explosion Hazard Data*

**Flash Point:** No Data      **Flammable Limits; LEL:** No Data; **UEL:** No Data

**Extinguishing Media:** Water, CO<sub>2</sub>, dry chemical.

**Special Fire Fighting Procedures:** Treat as Class A. Wetted product is slippery. Pedestrian and vehicular traffic may face a slip hazard where wet product is located.

**Unusual Fire and Explosion Hazards:** Handle so as to minimize dusting, and eliminate open flame and other sources of ignition of dust. Watch out for slippery conditions when product becomes wet.

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## Water Management Polymers

### Section IV -- Reactivity Data

**Stability:** Chemically stable      **Conditions to Avoid:** High heat sources, sparks, open flame.  
**Incompatibility (Materials to avoid):** Strong oxidants such as liquid chlorine, enriched gaseous or liquid oxygen, and chemical bleach, such as sodium or calcium hypochlorite.

**Hazardous Decomposition or Byproducts:** Burning may release noxious fumes and gases such as carbon monoxide, nitrous oxides, acetic acid, sulfuric acid, sulfur dioxide, ammonia or other noxious or toxic compounds, depending on the combustion sources.

**Hazardous Polymerization:** Will Not Occur

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### Section V -- Health Hazard Data

**Route(s) of Entry:** Inhalation--yes (dust)    Skin: Chronic    Ingestion: No      Eyes: Yes

#### Health Hazards (Acute and Chronic):

*Acute:* Inhalation of large amounts of dust may cause mild irritation of upper respiratory tract (nose and throat) and lungs. Eye contact may cause slight irritation and redness. Ingestion: Nontoxic by ingestion. Dry product contains 0.01% or less free acrylamide monomer. Less when added to water.

*Chronic:* Long term inhalation exposure to rats for a lifetime (2 years) using a sodium polyacrylate that had been micronized to a respirable particle size (less than 10 micrometers) produced non-specific inflammation and chronic lung injury at 0.2 mg/m<sup>3</sup> and 0.8 mg/m<sup>3</sup>. At 0.8 mg/m<sup>3</sup>, tumors were seen in some animals. In the absence of chronic inflammation, tumors are not expected. There were no adverse effects of any kind at 0.05 mg/m<sup>3</sup>.

**Carcinogenicity:**    NTP: No      IARC: No      OSHA: No

Note: Dry material (Since 2001) contains less than 0.01% free acrylamide, which is listed as a suspected human carcinogen. When added to water during use, this amount is lowered further by the degree of dilution. The ACGIH classification is Carcinogen A3: Available evidence does not suggest that acrylamide is likely to cause human cancer except under uncommon or unlikely routes or levels of exposure. This product contains less than 0.01% free acrylamide.

**Signs and Symptoms of Exposure:** May experience nausea if large amounts are ingested. May cause mild irritation of upper respiratory tract (nose and throat) and lungs if large amounts of dust are inhaled. Prolonged contact with dry product: possible reddening, drying of skin or eyes on dry contact with itching, burning, or other discomfort. No toxic effects.

**Medical Conditions Generally Aggravated by Exposure:** Prolonged breathing of dust may aggravate existing respiratory conditions, or skin conditions (on contact) due to drying effect.

**Emergency and First Aid Procedures:** Flush eyes thoroughly with water. If inhaled, move to source of fresh air. Call a physician regarding any continued discomfort.

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## Water Management Polymers

### *Section VI -- Precautions for Safe Handling and Use*

**Handling:** Handle as an eye irritant, Do not get into eyes. Avoid prolonged or repeated skin contact, as dry material may irritate skin. Do not handle dust. Not intended for ingestion.

**Steps to be Taken in Case Material is Released or Spilled:** Sweep up and collect dry product. Avoid breathing dust. Do not flush to a drain, as clogging may result. Wash hands.

### *Section VI -- Precautions for Safe Handling and Use (continued)*

**Waste Disposal Method:** This material, when unadulterated, is not a RCRA regulated waste. It is a nonhazardous waste material suitable for approved solid waste landfill (normal trash). However, local disposal regulations may apply. Dispose in accordance with local, state, and federal regulations.

**Precautions to be Taken in Case Material is Released or Spilled:** If material becomes wet, it swells and causes slippery conditions. Guard against slips and falls.

**Other Precautions:** Store in a dry place. Avoid wetting material before use. Avoid repeated and prolonged dry skin contact. Dusty conditions may irritate eyes and respiratory system. When dusty conditions are created, wear goggles and respirator with high efficiency filter.

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### *Section VI -- Control Measures*

**Respiratory Protection:** If concentrations of airborne particles exceed 0.05 mg/m<sup>3</sup>, use a NIOSH approved dust respirator with high efficiency filter in accordance with ANSI Z88.2

**Ventilation:** Not needed for normal use. For large-scale packaging or manufacturing, sufficient mechanical or local ventilation should be in place to maintain exposures at or below the recommended level of 0.05 mg/m<sup>3</sup>.

**Local Exhaust:** Not needed for normal use. For large-scale packaging or manufacturing, ensure airborne particles are removed.

**Protective Gloves:** Recommended for repeated handling.

**Eye Protection:** Safety Glasses or goggles recommended. ANSI Z87.1 standard safety glasses alone do not protect from dust.

**Other Protective Clothing or Equipment:** Eye wash should be available for large scale packaging or manufacturing of this material. Not needed for normal use.

**Work/Hygienic Practices:** Wash hands after handling. If spilled on clothes, wash as usual.

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### *Regulatory Information*

TSCA:	Components listed.
SARA Title III:	Section 311/312: No reporting required
	Section 313: No reporting required.