

MSDS • Potassium Polyacrylate

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SECTION 1: NAME & HAZARD SUMMARY

Material Name: Potassium polyacrylate

Synonyms: Dehydrated Gel, Baby Diaper Gel, WaterLoc, LiquiBlock

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 regulatory information.

Read the entire MSDS for a more thorough evaluation of the hazards.

SECTION 2: INGREDIENTS

	%	OSHA PEL
Potassium Polyacrylate CAS# 9003-04-7	100	Not Listed

Values are not product specifications.

SECTION 3: PHYSICAL DATA

Appearance	White Granular Powder
Odor	No odor
pH	5.5 – 6.5
Specific Gravity (Bulk Density)	(1% in water)
Vapor Pressure	0.4 – 0.7 g/ml
Vapor Density	<10mmHg
Melting Point	NE >390oF
Freezing Point	NA
Boiling Point	NA
Solubility in Water	Insoluble
Evaporation Rate (%)	< 1.0

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

General Fire Hazards

No recognized fire hazards

Fire and Explosive Properties

Flammability Classification: None

Flash Point NA

Flammable Limits - Upper NE
Lower NE



SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Hazardous Combustion Products

None known.

Extinguishing Media

Flash Point Method

Dry chemical, foam, carbon dioxide, and water fog. Extremely slippery conditions are created if spilled product comes in contact with water.

Fire Fighting Instructions

Firefighters should wear full protective clothing including self-contained breathing apparatus.

NFPA Ratings:

Health: 1 Fire: 0 Reactivity: 0

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

SECTION 5: HANDLING, STORAGE, STABILITY AND REACTIVITY DATA

Handling

Handle as an eye and respiratory tract irritant.

Storage

Store in a dry, closed container.

SECTION 6: HEALTH HAZARD ASSESSMENT

Emergency Overview

Potassium polyacrylate is a white, granular, odorless polymer that yields a gel-like material with the addition of water. It is insoluble in water and causes extremely slippery conditions when wet. Although not regulated as a hazardous material, the respirable dust is potential respiratory tract irritant. The manufacturer recommends an eight-hour exposure limit of 0.05 mg/m³.

Potential Health Effects: Eyes

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

Potential Health Effects: Skin

Exposure to the dust, such as in manufacturing, may aggravate existing skin conditions due to drying effect.

Potential Health Effects: Ingestion

Although not a likely route of entry, tests have shown that polyacrylate absorbents are non-toxic if ingested. However, as in any instance of non-food consumption, seek medical attention in the event of any adverse symptoms.

Potential Health Effects: Inhalation

Exposure to respirable dust may cause respiratory tract and lung irritation and may aggravate existing

SECTION 7 SPILL, LEAK AND WASTE DISPOSAL INFORMATION

Containment Procedures

Sweep or vacuum material when possible and shovel into a waste container.

Clean up procedures

Use caution after contact of product with water, as extremely slippery conditions will result. Residuals may be flushed with water into the drain for normal wastewater treatment. This is a non-hazardous waste suitable for disposal in an approved solid waste landfill.

Evacuation Procedures

None required.

Special Procedures

Avoid respirable dust inhalation during clean up. Wear appropriate respirator.

SECTION 8 FIRST AID AND SPECIAL PROTECTION INFORMATION

First Aid

First Aid: Eyes

Immediately flush with plenty of water. Remove particles remaining under the eyelids. Get medical attention if irritation persists. First Aid: Skin Remove polyacrylate absorbent dust from skin using soap and water.

First Aid: Ingestion

Non-toxic by ingestion. 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.

Exposure Guidelines

A: General Product Information

This product is not regulated as a hazardous material. However, the manufacturer recognizes the potential for respiratory tract irritation and recommends an eight-hour exposure limit of 0.05 mg/m³.

B: Component Exposure Limits

No information available.

Engineering Controls

Provide local exhaust ventilation to maintain worker exposure to less than 0.05 mg/m³ over an eight-hour period.

Personal Protective Equipment

Personal Protective Equipments: Eyes/Face

Wear safety glasses with side shields or goggles.

Personal Protective Equipments: Skin

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

SECTION 8 FIRST AID AND SPECIAL PROTECTION INFORMATION

Personal Protective Equipment

Personal Protective Equipments: Respiratory

Wear respirator with a high efficiency filter is particulate concentration in the work area exceeds 0.05 mg/m³ an eight hour time period.

Personal Protective Equipments: General

Obey reasonable safety precautions and practice good housekeeping. Wash thoroughly after handling.

SECTION 9 TOXICOLOGY

ORL-RAT LD50: >40 g/kg

IHL-RAT LC50: N.A.

SKN-RBT LD50: N.A.

Acute effects: Irritating dust Chronic effects: N.A. Target organs: N.A.

B: Acute Toxicity – LD50/LC50 Potassium polyacrylate (9003-04-7)
LD50: Oral LD50 Rat: > 40g/kg

Carcinogenicity: Component Carcinogenicity

No information is available.

Chronic Toxicity

Chronic inhalation exposure to rates for a lifetime (two years) using potassium polyacrylate that had been micronized to a respirable particle size (less than 10 microns) produced non-specific inflammation and chronic lung injury at 0.2 mg/m³ and 0.8 mg/m³. Also, at 0.8 mg/m³, tumors were seen in some test animals. In the absence of chronic inflammation, tumors are not expected. There were no adverse effects detected at 0.05 mg/m³.

Mutagenicity

Potassium polyacrylate had no effect in mutagenicity tests.

SECTION 10 REGULATORY INFORMATION

US Federal Regulations

A: General Product Information

This product is not federally regulated as a hazardous material.

B: Clean Air Act

No information is available.

C: Component Analysis

No information available.

D: Food and Drug Administration

No information available.

SECTION 10 REGULATORY INFORMATION

State Regulations

A: General Product Information

This product is not regulated by any state as a hazardous material.

B. Component Analysis – State

None of this product's components are listed on the state lists from CA, FL, MA, NJ, or PA.

SECTION 11 • TRANSPORT INFORMATION

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

SECTION 12 • OTHER INFORMATION

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