

MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: *LiquiBlock*[™] 44-OC EFFECTIVE DATE: 1 December 2004

CHEMICAL FAMILY: Polyacrylate salt

CHEMICAL NAME: Sodium polyacrylate

COMPANY IDENTIFICATION:

SPE CHEMICALS CO.,LTO.

ROOM 1615,NO:345 JINXIANG ROAD,PUDONG,SHANGHAI,CHINA 201206

CHEMTREC 86-21-51386314

SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

CAS # Component Percent OSHA HAZARD

9003-04-7 Sodium Polyacrylate

Not Available Post Treated – Trade Secret

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.

SECTION 3 – HAZARDS IDENTIFICATION

Emergency Overview

Sodium 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
respiratory conditions.

HMIS Ratings: Health: 1 Fire: 0 Reactivity: 0

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

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SECTION 4 –FIRST AID MEASURES

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.

SECTION 5 – FIRE-FIGHTING MEASURES

General Fire Hazards

No recognized fire hazards associated with the finished product.

Fire and Explosive Properties

Flammability Classification: None

Flash Point NA Flash Point Method

Flammable Limits - Upper NE

Lower NE

Hazardous Combustion Products

None known.

Extinguishing Media

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 * = Chronic Hazard

SECTION 6 – ACCIDENTAL RELEASE MEASURES

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

maybe 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.

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SECTION 7 – HANDLING AND STORAGE

Handling

Handle as an eye and respiratory tract irritant.

Storage

Store in a dry, closed container.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

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.

Personal Protective Equipments: Respiratory

Wear respirator with a high efficiency filter if particulate concentration in the work area exceeds 0.05 mg/m³

over an eight hour time period.

Personal Protective Equipments: General

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

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor White Granular Powder, no odor

pH 5.5 – 6.5 (1% in water)

Specific Gravity (Bulk Density) 0.4 – 0.7 g/ml

Vapor Pressure < 10 mm Hg

Vapor Density NE

Melting Point > 390 °F

Freezing Point NA

Boiling Point NA

Solubility in Water Insoluble

Evaporation Rate (%) < 1.0

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SECTION 10– STABILITY AND REACTIVITY

Chemical Stability

This material is chemically stable under normal and anticipated storage and handling conditions.

Chemical Stability: Conditions to Avoid

None

Incompatibility

None

Hazardous Decomposition Products

Decomposition above 200 °C

Hazardous Polymerization

Will not occur.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute and Chronic Toxicity

A: General Product Information:

Acute oral toxicity: LD₅₀ rat

Dose: > 5000 mg/kg

Method: Limit Test

Acute dermal toxicity: LD₅₀ rat

Dose: > 2000 mg/kg

Method: Limit Test

Skin irritation: Rabbit

Method: OECD Nr. 404

Very slight irritant

Eye irritation: Rabbit

Method: OECD Nr. 405

Very slight irritant

Sensitization: Guinea pig

Method: OECD Nr. 406

Result: 0/20

No sensitization

B: Acute Toxicity – LD₅₀/LC₅₀

Sodium 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 sodium 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

Sodium polyacrylate had no effect in mutagenicity tests.

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SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity

A: General Product Information

Composted polyacrylate absorbents are non-toxic to aquatic or terrestrial organisms at predicted exposure levels.

B: Component Analysis – Ecotoxicity – Aquatic Toxicity

No information available.

Environmental Fate

Polyacrylate absorbents are relatively inert in aerobic and anaerobic conditions. They are immobile in landfills and soil systems (> 90% retention), with the mobile fraction showing biodegradability. They are also compatible with incineration of municipal solid waste. Incidental down-the-drain disposal of small quantities of polyacrylic absorbents will not affect the performance of wastewater treatment systems.

SECTION 13 – DISPOSAL CONSIDERATIONS

US EPA Waste Number & Descriptions

A: General Product Information

This product is a non-hazardous waste material suitable for approved solid waste landfills.

B: 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 14 – TRANSPORTATION INFORMATION

International Transportation Regulations

This product is not transport regulated.

SECTION 15 –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.

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.

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SECTION 15 –REGULATORY INFORMATION, continued

Component Analysis – Inventory

Component CAS # TSCA CAN EEC

Sodium Polyacrylate 9003-04-7 Yes DSL No

SECTION 16 – OTHER INFORMATION

Revision Information:

Revision Date: 1 December 2004

Supersedes Revision Dated: 16 March 2004

Reason for Revision: Review and update all sections.

Key: N/A – Not Applicable NE – Not Established

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human body is intended.