

MATERIAL SAFETY DATA SHEET

LP32C DLC®-A

Issue Date: November 30, 2004

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1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

TRADE NAME: LP32C DLC-A

CHEMICAL NAME: Liquid Polysulfide Polymer on Silicon Dioxide

Company:



NATROCHEM, INC.
P.O. Box 1205
Savannah, GA 31402-1205

HMIS RATING	
HEALTH	1
FLAMMABILITY	1
REACTIVITY	0

Telephone Numbers:

Transportation Emergencies:

CHEMTREC (U.S.A.): (800) 424-9300 (24 hours)

CHEMTREC (International): (202) 483-7616 (24 hours, call collect)

Product Information: (912) 236-4464 (EST, 8:00AM – 4:00PM M-F)

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT NAME	CAS#	PERCENT
Liquid Polysulfide	68611-50-7	72
Silicon Dioxide	112926-00-8	28

Contains no detectable crystalline silica (detection limit <0.01% by weight).

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: CAUTION! May cause irritation.

EYE: Avoid contact with eyes; may cause irritation and pain. Symptoms include stinging, tearing, and redness.

SKIN: Avoid prolonged, repeated, or excessive contact with skin; may cause irritation and discomfort.

INGESTION: May cause nausea, vomiting, pain, and stomach upset.

INHALATION: Avoid prolonged or repeated inhalation of dust; may irritate the respiratory tract.

4. FIRST AID MEASURES

INHALATION: Remove to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

EYE/SKIN CONTACT: Immediately flush eyes and skin with plenty of water (soap and water on skin) for at least 15 minutes. Get medical attention if irritation persists.

INGESTION: Seek medical attention. Immediately induce vomiting, as directed by medical personnel.

NOTES TO PHYSICIAN: Treat symptomatically. Treatment should be directed at preventing absorption.

5. FIRE FIGHTING MEASURES

FLASH POINT: >93.3°C (>200°F)

EXTINGUISHING MEDIA: Extinguish small fires with dry chemical, carbon dioxide, water spray or foam. Large fires with water spray, fog, or alcohol foam.

SPECIAL FIREFIGHTING PROCEDURES: Firefighters and others who may be exposed to the products of combustion should be equipped with NIOSH approved positive-pressure self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Minimize spill area. Vacuum spill material and place in plastic bags for disposal according to local, state, and federal regulations. Isolate the spill area and keep unnecessary and unprotected personnel from entering.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN DURING HANDLING AND STORAGE: Store in a dry area. If transferring material into flammable solvents, use proper grounding to avoid electrical sparks. Product surface alterations caused by calcining or mixing with additives may alter toxicological properties.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits: 8-hour Time Weighted Average (TWA); 15-minute Short-Term Exposure Limit (STEL)

OSHA: 6 mg/m³ (total dust) TWA. 29 CFR 1910.1000

ACGIH: 10 mg/m³ (total amorphous dust) TWA. 3 mg/m³ (respirable nuisance particulate) TWA.

RESPIRATORY PROTECTION: Use a NIOSH approved dust filter respirator for exposure above permissible exposure limits. The respiratory use limitations made by NIOSH or the manufacturer must be observed. Respiratory protection programs must be in accordance with 29 CFR 1910.134.

VENTILATION: General or local exhaust is recommended to maintain employee exposure below permissible exposure limits.

EYE AND FACE PROTECTION: If eye exposure to powder is likely, use tight fitting protective goggles.

PROTECTIVE GLOVES: Cloth. Leather. Rubber.

OTHER PROTECTIVE EQUIPMENT: Boots, apron, or chemical suits should be used to prevent skin contact. Personal protective clothing and use of equipment must be in accordance with 29 CFR 1910.132 (general requirements), .133 (eye and face protection), and .138 (hand protection).

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: N/A
SPECIFIC GRAVITY (Water = 1): 1.44
SOLUBILITY (wt.% in water): Insoluble
VAPOR PRESSURE: N/A
PHYSICAL STATE: Free-flowing powder
COLOR: Off-white to tan.

VAPOR DENSITY (Air=1): N/A
FREEZING/MELTING POINT: N/A
% VOLATILE: <1.0
EVAPORATION RATE: <1.0
ODOR: mercaptan; sulfur

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions of use.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITY (CONDITIONS TO AVOID): High temperatures (>800°C) treatment (calcining). Avoid alteration of product properties before use. Calcining, which may result in crystalline formation, or mixing with additives may alter toxicological properties. Avoid contact with oxidizers and acids.

HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS: Formaldehyde and/or other aldehydes, oxides of sulfur, smoke, soot, and toxic fumes (e.g. oxides of carbon), low molecular weight hydrocarbons and hydrogen sulfide.

11. TOXICOLOGICAL INFORMATION

ACUTE INHALATION LC50: Nuisance dust

ACUTE DERMAL LD50: N/A

SKIN IRRITATION: Mildly irritating.

EYE IRRITATION: Mildly irritating.

ACUTE ORAL LD50: Estimated >5 g/kg. Not significantly toxic.

CHRONIC EFFECTS/CARCINOGENICITY: This product is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

MEDICAL CONDITIONS AGGRAVATED: None known.

EFFECTS OF OVEREXPOSURE:

ACUTE: Excessive contact with powder can cause drying of mucous membranes of nose, eyes, and throat due to absorption of moisture and oils. This material can also cause nasal irritation and nosebleeds. Eye contact with powder can result in mild irritation.

CHRONIC: An epidemiological study was conducted which included 165 precipitated silica workers who had been exposed an average time span of 8.6 years. Of these 165 workers, 44 had been exposed for an average of 18 years. No adverse effects were noted in complete medical examinations (including chest roentgenograms) of these workers. Pulmonary function decrements were correlated only with smoking and age but not with the degree of duration of dust exposures. Laboratory studies have also been conducted in small animals via inhalation to levels of precipitated silica dust of up to 126 mg/m³ per periods from six months to two years. Although precipitated silica was temporarily deposited in the animals' lungs, most of the deposited material was cleared soon after the dust exposure ended. The results of the studies performed by, or known to, PPG indicate a very low order of pulmonary activity for synthetic precipitated silicas. PPG recommends that person with breathing problems or lung disease should not work in dusty areas unless a physician approves and certifies their fitness to wear respiratory protection.

Toxicity tests performed on similar liquid polysulfide polymers indicate they are neither acutely toxic by ingestion nor cause eye or skin irritation.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: for HiSil ABS

EC₀: >1000 ppm (daphnia magna) (24-hour acute immobilization test)

EC₀: >10,000 ppm (rainbow trout) (4-day static study)

EC₀: >10,000 ppm (freshwater fish) (96-hour static acute toxicity study)

No data are available on the polysulfide content of this product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Waste from this product may be disposed of in a sanitary landfill if state and local regulations permit. Care should be taken to avoid creation of dust during disposal operations.

14. TRANSPORT INFORMATION

USA DOT DESCRIPTION: Proper Shipping Name: Not regulated.

DOT Label: Not applicable.

DOT Label Number L114.
UN/NA Id Number: Not Applicable.
WHMIS Label: F114

15. REGULATORY INFORMATION

USA TSCA: Chemical components of this product are on the section 8(b) Chemical Substance Inventory List (40 CFR 710).

EUROPE EINECS: Silicon dioxide is listed on EINECS (231-545-4) as its general CAS# 7631-86-9

CANADA DSL: Silicon dioxide is listed on the Canadian DSL. The LP component is not a controlled product.

AUSTRALIA AICS: Silicon dioxide is listed on AICS.

KOREA ECL: Silicon dioxide is listed on ECL.

JAPAN MITI (ENCS): This product is listed on MITI.

PHILIPPINES PICCS: Silicon dioxide is listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS).

SARA TITLE III:

SARA (311,312) Hazard Class: Silicon Dioxide – Acute Health Hazard.

SARA (313) toxic chemicals: No regulated ingredients.

SARA Section 302 Extremely Hazardous Substances: No regulated ingredients.

State Right-to-Know:

Pennsylvania – New Jersey R-T-K. Non-hazardous trade secret ingredient(s) -- Proprietary, Balance.

California – California Proposition 65 Warning: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Formaldehyde 50-00-0 Trace (less than 0.01%) – cancer hazard.

Ethylene oxide 75-21-8 Trace (less than 0.01%) – cancer and reproductive hazard.

16. OTHER INFORMATION

Revision Note: Original issue November 30, 2004

Prepared by: J. Craig Moore.

N/A = Not applicable N/D = Not determined N/DA = No Data Available N/E = Not established

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