

MATERIAL SAFETY DATA SHEET  
Natro-Cel PE-A

Date Revised: September 28, 2011

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SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: Natro-Cel PE-A  
CHEMICAL NAME: Polyethylene homopolymer on silica

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)

SECTION 2 - HAZARDOUS INGREDIENTS

The component(s) listed below is identified as a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

INGREDIENT	CAS REGISTRY	PERCENT
Silicon Dioxide	112926-00-8	26-30

SECTION 3 - PHYSICAL DATA

Boiling Point: N/A

Vapor Pressure (mm Hg): Negligible

Vapor Density (Air = 1): N/A

Solubility in Water: Negligible

Appearance: Off-white, free flowing powder

Specific Gravity: 1.073

Percent Volatiles: N/A

Evaporation Rate: N/A

Odor: slight

SECTION 4 - FIRE & EXPLOSION DATA

FLASH POINT (Method Used): >230°C (>446F) (COC)

FLAMMABLE LIMITS: N/A

AUTOIGNITION TEMPERATURE: None known.

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical or fine water spray.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus approved by NIOSH. Watch footing on floors and stairs because of possible melting and spreading. Use spray to keep containers cool.

UNUSUAL FIRE & EXPLOSION HAZARDS: Fire point >313°C (>595F). Melts in proximity to fires causing slippery floors and stairs. Static charges on powders or powders in liquids may ignite flammable atmosphere.

SECTION 5 - PERMISSIBLE EXPOSURE LIMITS

Silicon Dioxide: OSHA: 6 mg/m<sup>3</sup> (total dust), 8 hr. TWA; 29 CFR 1910.1000 (rev. 3/1/89). PPG Internal Permissible Exposure Limit (IPEL); Synthetic Precipitated Silicate: 5 mg/m<sup>3</sup> (respirable dust), 8 hr. TWA.

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SECTION 6 - HEALTH HAZARD DATA

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CHRONIC HEALTH EFFECTS: Silicon Dioxide: An epidemiological study was conducted which included 165 precipitated silica workers who had been exposed for an average of 18 years. No adverse effects were noted in complete medical examination (including chest roentgenograms) of these workers. Pulmonary function decrements were correlated only with smoking and age but not with the degree or duration of dust exposure. Laboratory studies have also been conducted in small animals via inhalation to levels of precipitated silica dust of up to 126 mg/m<sup>3</sup> for 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 all studies performed by, or known to, PPG indicate a very low order of pulmonary activity for synthetic precipitated silica.

PRIMARY ROUTE OF ENTRY- Inhalation.

CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN: None.

NTP: No                      IARC: No                      OSHA: No

EFFECTS OF EXPOSURE-

EYES- Mildly irritating. Excessive contact with powder can cause drying of mucous membranes of eyes due to absorption of moisture and oils.

SKIN- Mildly irritating.

INHALATION- Nuisance dust. Excessive contact with powder can cause drying of mucous membranes of nose and throat due to absorption of moisture and oils. This material can also cause nasal irritation and nosebleeds.

INGESTION- Not significantly toxic. Acute oral toxicity in rats: LD<sub>50</sub> >2000 mg/kg.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE- Silicon Dioxide: Persons with breathing problems or lung disease should not work in dusty areas unless a physician approves and certifies their fitness to wear respiratory protection.

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SECTION 7 - EMERGENCY & FIRST AID PROCEDURES

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EYE CONTACT: Immediately rinse with clean water for 15 minutes. Retract eyelids often. If irritation persists, seek medical attention.

SKIN CONTACT: Immediately remove contaminated clothing. Wash skin thoroughly with mild soap and water. Flush with lukewarm water for 15 minutes. Seek medical attention if ill effect or irritation develops.

INHALATION: If overcome by exposure, remove victim to fresh air.

INGESTION: N/DA.

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**SECTION 8 - REACTIVITY DATA**

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STABILITY: Stable.

MATERIALS TO AVOID- Avoid alteration of product properties before reuse. Calcining, which may result in crystalline formation or mixing with additives may alter toxicological properties. Strong oxidizing agents, although comparatively stable as are other polyethylenes.

CONDITIONS TO AVOID- Avoid high temperatures (>800° C) treatment. Excessive heat. Polyethylene starts breaking down at temperatures over 100EC; other products are more stable. Avoid direct contact with open flame.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and combustible gases may be generated.

HAZARDOUS POLYMERIZATION: Will not occur.

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**SECTION 9 - SPILL OR LEAK PROCEDURES**

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: MINIMIZE SPILL AREA. Vacuum spill material and place in closed plastic bags for disposal.

WASTE DISPOSAL METHOD: In accordance with local, state, and federal regulations.

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**SECTION 10 - SPECIAL PROTECTION INFORMATION**

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RESPIRATORY PROTECTION: Use a respirator such as 3M 9900 or equivalent for protection against pneumoconiosis producing dusts.

VENTILATION: Provide explosion proof ventilation as required to control airborne dust levels. The sum total of all ingredients may emit vapors during normal processing. All possible health effects are not known and individual sensitivities will vary. Effective exhaust ventilation should always be provided to draw dust, fumes and vapors away from workers to prevent routine inhalation. Ventilation should be adequate to maintain ambient workplace atmosphere below the limits listed in Section V.

PROTECTIVE GLOVES: Impervious gloves to protect against contact with product.

EYE PROTECTION: Safety goggles.

OTHER PROTECTIVE EQUIPMENT: Protective clothing, eye wash station, safety shower.

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**SECTION 11 - SPECIAL PRECAUTIONS**

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HANDLING AND STORAGE: Handling can create explosive dust clouds. Eliminate ignition sources, use explosive proof equipment. Conveying and processing equipment should be spark-proof, well bonded and grounded. Avoid dust accumulations. Avoid breathing fumes from heating operations. Very slippery on floors, avoid spillage.

OTHER PRECAUTIONS: Wash with soap and water before eating, drinking, smoking, or using toilet facilities. Launder contaminated clothing before reuse.

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**SECTION 12 - ENVIRONMENTAL INFORMATION**

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This product contains no toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372)

This information must be included in all MSDS' that are copied and distributed for this material.

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THE FOLLOWING INFORMATION MAY BE USEFUL IN COMPLYING WITH VARIOUS STATE AND FEDERAL LAWS AND REGULATIONS UNDER VARIOUS ENVIRONMENTAL STATUES:

Reportable Quantity (RQ), EPA Regulation 40 CFR 302 (CERCLA Section 102):

No RQ for product or any constituent greater than 1% or 0.1% (carcinogen).

Threshold Planning Quantity (TPQ), EPA Regulation 40 CFR 355 (SARA Sections 301-313):

No TPQ for product or any constituent greater than 1% or 0.1% (carcinogen).

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Hazardous Chemical Reporting, EPA Regulation 40 CFR 370 (SARA Sections 311-312):

Silicon Dioxide- Acute Hazard

The components of this product are included on the TSCA Chemical Substance Inventory.

TRANSPORTATION: Not regulated.

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**SECTION 13 - OTHER INFORMATION**

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Revision Note: Revised CAS number for silica.

Prepared by: Craig Moore

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

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