


MATERIAL SAFETY DATA SHEET  
Natro-Cel<sup>®</sup> 35-A

Date Revised: January 25, 2012

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SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: Natro-Cel 35-A  
CHEMICAL NAME: TMPTMA on silica

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

HMIS RATING	
Health	2
Flammability	1
Reactivity	1

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 - COMPONENTS

COMPONENT NAME	CAS#	% COMPOSITION
Trimethylolpropane trimethacrylate	3290-92-4	72
Silicon Dioxide	112926-00-8	28

SECTION 3 - PHYSICAL DATA

Boiling Point: No / Data Available      Specific Gravity: 1.22 (Calculated)  
Vapor Pressure (mm Hg): N/DA      Percent Volatiles: Negligible  
Vapor Density (Air = 1): N/DA      Evaporation Rate: N/DA  
Solubility in Water: Negligible      Odor: mild  
Appearance: White, free flowing powder.

SECTION 4 - FIRE & EXPLOSION DATA

FLASH POINT (Method Used): >93°C(>200°F) (PMCC)

FLAMMABLE LIMITS: N/DA

AUTOIGNITION TEMPERATURE: N/DA

EXTINGUISHING MEDIA: Foam, CO<sub>2</sub>, dry chemical, water spray.

SPECIAL FIRE FIGHTING PROCEDURES: Do not enter area without proper protection. Decomposition products possible. Fight fire from safe distance, protected location. Heat and/or impurities may increase temperature, build pressure, or rupture closed containers, spreading fire, increasing risk of burn or injuries. Water may be ineffective in firefighting due to low solubility. Use water spray or fog for cooling.

UNUSUAL FIRE & EXPLOSION HAZARDS: High temperatures, inhibitor depletion, accidental impurities, exposure to radiation, localized heat sources such as drum or band heaters, oxidizers -- may cause spontaneous polymerization reaction, generating heat and pressure. Closed containers may rupture and explode during runaway polymerization.

SECTION 5 - HEALTH HAZARD DATA

CHRONIC HEALTH EFFECTS: 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 animal's 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- Eye, inhalation, and skin

CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN: None.

NTP: No

IARC: No

OSHA: No

#### EFFECTS OF EXPOSURE-

EYES- May cause moderate irritation, including burning sensation, tearing, redness and swelling. Excessive contact with powder can cause drying of mucous membranes of eyes due to absorption of moisture and oils.

SKIN- No significant signs or symptoms indicative of any adverse health effects are expected to occur as a result of skin absorption. Skin irritation may include a slight localized redness or rash. May cause delayed skin irritation and blistering. Repeated exposure may cause skin sensitization (an allergic skin reaction).

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. Symptoms of irritation may also include coughing, mucous production and shortness of breath.

INGESTION- This material may be a slight health hazard if ingested in large quantities.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE- 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 6 - EMERGENCY & FIRST AID PROCEDURES

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EYE CONTACT: Immediately rinse with clean water for 20-30 minutes. Retract eyelids often. Seek medical attention.

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

INHALATION: If overcome by exposure, remove victim to fresh air. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.

INGESTION: If large quantities swallowed, give lukewarm water (pint) if victim completely conscious/alert. Do not induce vomiting, risk of damage to lungs exceeds poisoning risk. Obtain emergency medical attention.

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#### SECTION 7 - REACTIVITY DATA

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STABILITY: Stable when properly stored and handled. Unstable upon depletion of inhibitor.

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. Avoid strong oxidizers, free radical initiators, inert gases, and oxygen scavengers.

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CONDITIONS TO AVOID- Avoid high temperatures such as calcining (>800°C). Avoid direct sunlight, strong oxidizers and ultraviolet radiation. Avoid inert gas blanketing.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon when burned and acrid smoke.

HAZARDOUS POLYMERIZATION: May occur. This material contains an inhibitor (HQ, MEHQ, etc) at <1%.

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#### SECTION 8 - 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. Use dust suppressant. Report per regulatory requirements. Release can cause fire or explosion. May polymerize and release heat or gases. Liquids and vapors may ignite. Evacuate and limit access. Equip responders with proper protection. Kill all ignition sources. Prevent flow to sewers and public waters. Blanket with firefighting foam. Restrict water use for cleanup.

WASTE DISPOSAL METHOD: In accordance with local, state, and federal regulations. Non-contaminated, properly inhibited product is not a RCRA hazardous waste. However, contaminated product/soil/water may be RCRA hazardous waste due to potential for internal heat generation (See 40 CFR 261 and 29 CFR 1910). It is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste. Use registered transporters. Disposal options include landfilling solids at permitted sites; fuel blending or incinerating liquids. Assure emissions comply with applicable regulations. Dilute aqueous waste may biodegrade; avoid overloading/poisoning plant biomass. Assure effluent complies with applicable regulations.

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#### SECTION 9 - 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 10 - SPECIAL PRECAUTIONS

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HANDLING AND STORAGE: Upon loss of inhibitor, the product can polymerize, raising temperature and pressure, possibly rupturing container. Do not blanket with oxygen-free gas as it renders the inhibitor ineffective. Do not store below 32°F, inhibitor can separate as a solid. If frozen, warm and remix material gently (<90°F). Prevent moisture contact. 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.

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 11 - REGULATORY INFORMATION**


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USA (TSCA): The components of this product are contained on the Inventory.

**INTERNATIONAL INVENTORY STATUS:**

Australia (AICS): included on the inventory  
 Canada (DSL): included on the inventory  
 Europe (EINECS): included on the inventory  
 Japan (ENCS): included on the inventory  
 Korea (ECL): included on the inventory  
 China (IECSC): included on the inventory  
 Philippines (PICCS): included on the inventory

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**CHEMICAL INVENTORIES:**

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

INGREDIENT	ACGIH (TLV)	OSHA (PEL)	UNITS
Silicon Dioxide	10	6	mg/m <sup>3</sup>

SARA TITLE III, SECTION 313 - TOXIC CHEMICALS: This product does not contain toxic chemical subject to the reporting requirements of Section 313.

**SECTION 302 & 304 - EXTREMELY HAZARDOUS SUBSTANCES:**

This product does not contain an Extremely Hazardous Substance subject to reporting under 40CFR 355.

**SECTION 311/312 - HAZARD CATEGORIES:** The physical and health hazard categories for this product are:

Immediate (Acute) Health Hazard: Silicon Dioxide - 28%  
 Delayed (Chronic) Health Hazard: None  
 Fire Hazard: None  
 Sudden Release of Pressure Hazard: None  
 Reactivity Hazard: None

CERCLA: This product does not contain any chemical subject to reporting as a CERCLA Hazardous Substance under 40CFR 372.

RCRA: This product is not a hazardous waste as listed in 40CFR 261.33. It does not exhibit any of the hazardous characteristics listed in 40CFR 261 Subpart C.

**TRANSPORTATION INFORMATION:**

Proper Shipping Name: Not regulated.

DOT Hazard Class: Not regulated.

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**SECTION 12 - OTHER INFORMATION**


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Revision Note: Updated 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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