

**NATROCHEM, INC.**Post Office Box 1205
Savannah, Georgia 31402-1205
(912) 236-4464**MATERIAL SAFETY
DATA SHEET****NATRO-CEL™ 46-A**

Date Revised: October 7, 1997

Page 1 of 5

SECTION I - PRODUCT IDENTIFICATIONTRADE NAME: Natro-cel 46-A
CHEMICAL NAME: Petroleum Process Oil on Silicon Dioxide

HMIS RATING	
Health	1
Flammability	1
Reactivity	0

SECTION II - COMPONENTS

COMPONENT NAME	CAS#
Distillates (petroleum), hydrotreated light naphthenic and	64742-53-6 and
Distillates (petroleum), hydrotreated heavy naphthenic Silicon Dioxide	64742-52-5 7531-86-9

SECTION III - PHYSICAL DATA

Boiling Point: IBP Approximately 241°F
Vapor Pressure (mm Hg): <0.01
Vapor Density (Air = 1): >5
Solubility in Water: Negligible, <0.1%
Appearance and Odor: Off white, free flowing powder with petroleum odor.

Specific Gravity: 1.064
Percent Volatiles: Negligible
Evaporation Rate: <0.01

SECTION IV - FIRE & EXPLOSION DATA

FLASH POINT (Method Used): 320°F (COC)
FLAMMABLE LIMITS: Estimated values: Lower 0.9% Upper 7%
AUTOIGNITION TEMPERATURE: <500°F

EXTINGUISHING MEDIA: Foam, water spray, dry chemical, carbon dioxide and vaporizing liquid type extinguishing agents may all be suitable for extinguishing fires involving this type of product, depending on size or potential size of fire and circumstances related to the situation. Plan fire protection and response strategy through consultation with local fire protection authorities or appropriate specialists.

SPECIAL FIRE FIGHTING PROCEDURES: The following procedures for this type of product are based on the recommendations in the National Fire Protection Association's "Fire Protection Guide on Hazardous Materials", Tenth Edition (1991):

Use water spray, dry chemical, foam or carbon dioxide to extinguish the fire. Use water to keep fire exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for persons attempting to stop a leak. Water spray may be used to flush spills away from exposures. Minimize breathing of gases, vapor, fumes or decomposition products. Use supplied-air breathing equipment for enclosed or confined spaces or as otherwise needed.

UNUSUAL FIRE & EXPLOSION HAZARDS: See Section VII, Hazardous Decomposition Products.

SECTION V - 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/m³ 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, skin contact.

CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN: None.

NTP: No

IARC: No

OSHA: No

EFFECTS OF EXPOSURE-

Repeated and prolonged overexposure to oil mists may result in droplet deposition, oil granuloma formation, inflammation and increased incidence of infection.

This product is judged to have an acute oral LD50 (rat) >5 g/kg of body weight, and an acute dermal LD50 (rabbit) >3.16 g/kg of body weight.

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. Prolonged or repeated skin contact tends to remove skin oils, possibly leading to irritation and dermatitis; however, based on human experience and available toxicological data, this product is judged to be neither a "corrosive" nor an "irritant" by OSHA criteria.

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- Product has a low order of acute oral and dermal toxicity, but minute amounts aspirated into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.

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.

SECTION VI - EMERGENCY & FIRST AID PROCEDURES

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. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from a high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of the injury.

SECTION VI - EMERGENCY & FIRST AID PROCEDURES (continued)

INHALATION: If overcome by exposure, remove victim to fresh air. Call a physician. If breathing is irregular or has stopped, start resuscitation; administer oxygen, if available. If overexposed to oil mist, remove from further exposure until excessive oil mist condition subsides.

INGESTION: If ingested, DO NOT induce vomiting; call a physician immediately.

SECTION VII - REACTIVITY DATA

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. Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc., as this presents a serious explosion hazard.

CONDITIONS TO AVOID- Avoid high temperatures (>800 C) treatment.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and sulfur, fumes, smoke, aldehydes and other decomposition products when burned.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VIII - SPILL OR LEAK PROCEDURES

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.

This product may be classified as an oil under Section 311 of the Clean Water Act, and under the Oil Pollution Act. Discharges or spills into or leading to surface waters that cause a sheen must be reported to the National Response Center (1-800-424-8802).

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

SECTION IX - SPECIAL PROTECTION INFORMATION

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.

SECTION X - SPECIAL PRECAUTIONS

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.

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

SECTION XI - REGULATORY INFORMATION**TOXIC SUBSTANCE CONTROL ACT (TSCA):**

The components of this product are contained on the Inventory of the Toxic Substance Control Act.

CHEMICAL INVENTORIES:**OSHA:**

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	ACGIH (TLV)	ACGIH (STEL)	OSHA (PEL)	UNITS
Silicon Dioxide	10		6	mg/m3
Petroleum Process Oil		10	5	mg/m3

SARA TITLE III INFORMATION:**SECTION 313 - TOXIC CHEMICALS:**

This product does not contain any toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act and 40 CFR 372.

CAS REGISTRY #	CHEMICAL NAME	PERCENT BY WEIGHT
----------------	---------------	-------------------

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

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:

Name of Chemical	Hazard	Percent in Product
Silicon Dioxide	Acute	28%

CERCLA:

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

TRANSPORTATION INFORMATION:

DOT Shipping Name: Not regulated.

DOT Identification Number:

SECTION XII - OTHER INFORMATION

Revision Note: New issue of raw material safety data sheet.

Prepared by: James L. Pye, Jr.

Title: Safety Coordinator

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

The information given in this MSDS was obtained from sources which we believe are reliable. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control, Natrochem, Inc. makes no warranty express or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon.

MARKETED BY

**HARWICK STANDARD
DISTRIBUTION CORPORATION**

60 S. Seiberling Street • Akron, Ohio 44305