MATERIAL SAFETY DATA SHEET

Natro-Cel A300-A

Date Revised: October 29, 2014

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SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: Natro-Cel A300-A

CHEMICAL NAME: Aromatic Process Oil blended with silica

HMIS RATING
Health 2
Flammability 1
Reactivity 1

Company:



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

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

INGREDIENTCAS REGISTRYPERCENTSilicon Dioxide112926-00-826-30Aromatic Oil; Extract, distillate, light64742-05-870-74

SECTION 3 - PHYSICAL DATA

Boiling Point: 320-556°C (609-1033°F) Specific Gravity: 1.163 Vapor Pressure (mm Hg): negligible Percent Volatiles: Nil

Vapor Density (Air = 1): not determined Evaporation Rate: not determined

Solubility in Water: Nil Odor: slight petroleum

Appearance: Tan powder

SECTION 4 - FIRE & EXPLOSION DATA

FLASH POINT (Method Used): 193°C (380°F) (COC)

AUTOIGNITION TEMPERATURE: 388°C (730°F) (estimated)

EXTINGUISHING MEDIA: CO2, water fog, chemical foam (AFFF/ATC), dry chemical powder, carbon dioxide.

SPECIAL FIRE FIGHTING PROCEDURES: Avoid using straight water streams. Water spray, fog, chemical foam (AFFF/ATC) must be applied carefully to avoid froth-over. Avoid excessive application. Use water spray to cool surfaces from as far a distance as possible. Keep run-off water out of sewers and water sources. Wear self-contained breathing apparatus when fire fighting in confined space.

UNUSUAL FIRE & EXPLOSION HAZARDS: Can be made to burn (flash point greater than 200°F).

SECTION 5 - Reactivity Data and Permissible Exposure Limits

Stability: Stable

MATERIALS TO AVOID- Avoid alteration of product properties before reuse. Avoid calcining, which may result in crystalline formation. Avoid mixing with additives that may alter toxicological properties. Avoid strong oxidizers.

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

Silicon Dioxide: OSHA: 6 mg/m3 (total dust), 8 hr. TWA; 29 CFR 1910.1000 (rev. 3/1/89). PPG Internal Permissible Exposure Limit (IPEL); Synthetic Precipitated Silicate: 5 mg/m3 (respirable dust), 8 hr. TWA.

Aromatic Oil: 8 hr. time weighted permissible exposure 0.2 mg/m3 (Raw Material Manufacturer Recommendation).

SECTION 6 - HEALTH HAZARD DATA

Routes of exposure: inhalation, skin absorption, skin contact, ingestion and eye contact.

Health Hazards:

ACUTE: Contact may result in slight eye irritation. Exposure may cause pulmonary irritation, dizziness, nausea and loss of consciousness.

CHRONIC HEALTH EFFECTS: Prolonged and repeated contact with aromatic process oil can cause dermatitis, folliculitis, oil acne. May cause skin sensitization. Absorption through the skin may result in liver damage. For 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/m3 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- Inhalation and skin.

CARCINOGENICITY: The International Agency for Research on Cancer IAAREC concluded that there is sufficient evidence for the carcinogenicity of aromatic oils, including extracts from solvent treatment of distillates in animals.

NTP: No IARC: Yes 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- May produce skin tumors with prolonged or repeated contact. Moderate irritation with prolonged or repeated contact. Avoid contact with skin. Repeated contact has produced skin cancer.

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- Slightly toxic (LD50 5-15 g/kg).

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE- Silicon <u>Dioxide</u>: 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 7 - 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 irritation develops.

INHALATION: If overcome by exposure, remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.

INGESTION: Consult a physician Give liquids and induce vomiting unless victim is unconscious. Obtain medical assistance. Small amounts which accidentally enter mouth should be rinsed out until taste of it is gone.

SECTION 8 - REACTIVITY DATA

Stability: Stable

MATERIALS TO AVOID- Avoid alteration of product properties before reuse. Avoid calcining, which may result in crystalline formation. Avoid mixing with additives that may alter toxicological properties. Avoid strong oxidizers.

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

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 9 - SPILL OR LEAK PROCEDURES

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

WASTE DISPOSAL METHOD: In accordance with local, state, and federal regulations. Do not flush to drain or storm sewer. Contract to authorized disposal service.

SECTION 10 - 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 11 - SPECIAL PRECAUTIONS

HANDLING AND STORAGE: NFPA Class IIIB 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 12 – ADDITIONAL INFORMATION

Transportation: US DOT, Not regulated.

SARA Title III: 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 (40CFR 372). This information must be included in all MSDSs that are copied and distributed for this material. Additional Regulatory Information: This product contains SARA 313 polycyclic aromatic compounds at

approximately 0.1%.

RCRA: This product has no components listed under 40CFR261.

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): Aromatic Oil (carcinogen).

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

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

Silicon Dioxide- Acute Hazard

Aromatic Oil- Chronic Hazard, Acute Hazard

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

WARNING! The International Agency for Research on Cancer classifies the type of petroleum oil in this product as carcinogenic. Prolonged and repeated lifetime skin contact with similar oils has produced skin tumors in laboratory animals. Oral and skin exposure to similar oils has produced toxic liver, thymus, bone marrow, blood (anemia) effects and death in laboratory animals. Oral and skin exposure of pregnant animals to similar oils has injured or been lethal to the unborn. Avoid contact with skin. If contact is unavoidable, wear oil-impervious protective gear. Incase of skin contact, promptly wash thoroughly with soap and water. Clothing soaked with this oil should be removed and laundered before reuse. Oil-soaked shoes should be destroyed. Minimize exposure to mist and dust. Wear approved respiratory protection if average airborn mist or dust exposure exceeds Holly's Recommended Occupational Exposure Limit of 0.2 milligrams per cubic meter of air for an 8-hour Time Weighted Average for Polynuclear Aromatic Hydrocarbons. WHMIS Classification: Class D Division 2A.

SECTION 13 - OTHER INFORMATION

Revision Date: October 29 ,2014 Note: Original issue. Prepared by: Craig Moore

N/A = Not applicable N/D = Not determined N/DA = No Data Available N/E = Not established The information and recommendations contained herein are based upon data that are believed to be accurate and 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.

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