

MATERIAL SAFETY DATA SHEET


NATRO-CEL[®] BCA-A

Date Revised: June 22, 2000

Page 1 of 4

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: NATRO-CEL BCA-A
CHEMICAL NAME: Monomeric ester 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)

SECTION II - 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	7631-86-9	26-30
Diethylene glycol monobutyl ether	112-34-5	1-5

SECTION III - PHYSICAL DATA

Boiling Point: N/DA

Specific Gravity: 1.174

Vapor Pressure (mm Hg): N/E

Percent Volatiles: < 1

Vapor Density (Air = 1): N/E

Evaporation Rate: Negligible

Solubility in Water: Slightly Soluble

Appearance and Odor: Off-white, free flowing powder with slight odor.

SECTION IV - FIRE & EXPLOSION DATA

FLASH POINT (Method Used): > 200° F (Setaflash Closed Cup)

FLAMMABLE LIMITS: N/D

AUTOIGNITION TEMPERATURE: N/D

EXTINGUISHING MEDIA: Use dry chemical, sand, water spray, or foam.

SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters and others who may be exposed to the products of combustion should be equipped with NIOSH approved positive pressure self-contained breathing apparatus (SCBA) and full protective clothing.

UNUSUAL FIRE & EXPLOSION HAZARDS: May liberate irritating or toxic vapors during combustion or decomposition. High temperatures can cause sealed containers to rupture due to build up of internal pressure. Cool with water.

SECTION V - PERMISSIBLE EXPOSURE LIMITS & TOXICITY

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.

SECTION V - PERMISSIBLE EXPOSURE LIMITS & TOXICITY (Cont'd)

TOXICITY INFORMATION: Components, Diethylene glycol monobutyl ether.

Oral LD50	Rat	5,660 mg/kg
	Rabbit	2,200 mg/kg
	Guinea pig	2,000 mg/kg
Dermal LD50	Rabbit	4,120 mg/kg

SECTION VI - 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 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, dust contact with eyes, skin.

CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN: None.

NTP: No IARC: No OSHA: No ACGIH: 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. The severity of reaction depends on duration of exposure and first aid administered.

SKIN- Mildly irritating. Absorption. Irritation can occur following prolonged or repeated contact.

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. Can be irritating to mucous membranes, especially following prolonged exposure to mists and/or vapors.

INGESTION- Not significantly toxic. Irritating to the mouth, throat, and esophagus.

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 VII - 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. Wash contaminated clothing before reuse.

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

SECTION VII - EMERGENCY & FIRST AID PROCEDURES

INGESTION: Seek medical attention. Induce vomiting, as directed by medical personnel, by giving either syrup of IPECAC followed by 2 glasses of water or by sticking finger down throat. DO NOT give anything by mouth if the person is drowsy, unconscious, or has not gag reflex.

NOTES TO PHYSICIAN: Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.

SECTION VIII - 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. Oxidizing agents.

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

HAZARDOUS DECOMPOSITION PRODUCTS: Flammable solvent vapors, smoke, soot, and toxic fumes (oxides of carbon).

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION IX - 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. Do not flush to sewer, stream, or other bodies of water.

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

SECTION X - 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 XI - 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. DO NOT store above 120° F.

SECTION XI - SPECIAL PRECAUTIONS

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

SECTION XII - ENVIRONMENTAL INFORMATION

This product contains the following 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):

CAS REGISTRY #	CHEMICAL NAME	PERCENT BY WEIGHT
112-34-5	Diethylene Glycol Monobutyl Ether	1-5

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

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).

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

Silicon Dioxide- Acute Hazard

Diethylene glycol monobutyl ether- Immediate (Acute) Health Hazard

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

Ozone-depleting Chemicals: None

CANADA:

This is a "controlled product" under the Canadian Workplace Hazardous Materials Information System (WHMIS).

Class D Division 2 Sub-division B

TRANSPORTATION: Not regulated.

SECTION XIII - OTHER INFORMATION

Revision Note: Added CHEMTREC information.

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.