MATERIAL SAFETY DATA SHEET

FLEXRICIN P4 DLC®-A

Date Reviewed: September 21, 2011

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

HMIS RATING	
Health	1
Flammability	1
Reactivity	0

TRADE NAME: Flexricin P4 DLC-A
CHEMICAL NAME: Ester on silicon dioxide

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 - INGREDIENTS

INGREDIENT	CAS #
Silicon Dioxide	112926-00-8
Flexricin P4 Ester	140-03-4

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

INGREDIENT	CAS #	ACGIH (TLV)	OSHA (PEL)	UNITS
Silicon Dioxide	112926-00-8	10	6	mg/m3

SECTION 3 - PHYSICAL DATA

Boiling Point: N/A
Vapor Pressure (mm Hg): N/DA
Vapor Density (Air = 1): Heavier than air
Solubility in Water: Insoluble
Appearance: Off-white, free flowing powder
Specific Gravity: 1.10
Percent Volatiles: Nil
Evaporation Rate: Slower than water
Odor: mild ester

SECTION 4 - FIRE & EXPLOSION DATA

FLASH POINT (Method Used): 360º F (COC)
FLAMMABLE LIMITS: N/D
AUTOIGNITION TEMPERATURE: N/DA
EXTINGUISHING MEDIA: Foam, carbon dioxide, dry chemicals.
SPECIAL FIRE FIGHTING PROCEDURES: Standard fireman's body protection and self-contained breathing apparatus is recommended.
UNUSUAL FIRE & EXPLOSION HAZARDS: None.

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/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, dust contact with eyes.

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- Irritation and soreness in throat and nose. 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. Vapors are minimal at room temperature.

INGESTION- Not significantly toxic. Oral toxicity is low.

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 6 - 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.

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

INGESTION: Give plenty of water and induce vomiting. Call a physician.

SECTION 7 - 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.

CONDITIONS TO AVOID- Avoid high temperatures (>800ºC) treatment. Keep from contact with oxidizing materials.

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

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 8 - 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.

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

SECTION 9 - 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 10 - 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. Store in closed containers. Protect from contamination with foreign materials.

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

SECTION 11 - 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:

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
NONE.		

This information must be included in all MSDSs 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:
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:
DOT Shipping Name: Oils, Liquid or solidified.
DOT Identification Number: N/DA.

SECTION 12 - OTHER INFORMATION

Revision Note: Revised silica CAS number. Prepared by: Craig Moore

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