MATERIAL SAFETY DATA SHEET TRIMENE BASE DLC[®]-A

Date Revised: October 18, 2011

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: Trimene Base DLC-A

CHEMICAL NAME: Ethyl Chloride, formaldehyde and ammonia reaction product 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.): |
| CHEMTREC (International): |
| Product Information: |

(800) 424-9300 (24 hours) (202) 483-7616 (24 hours, call collect) (912) 236-4464 (EST, 8:00AM - 4:00PM M-F)

COMPONENT NAME Silicon Dioxide Trimene Base

CAS# 112926-00-8 63512-71-0

SECTION 2 - COMPONENTS

SECTION 3 - PHYSICAL DATA Boiling Point: 102°C (215°F) Vapor Pressure (mm Hg): N/D Vapor Density (Air = 1): N/D Solubility in Water: Soluble in water and acetone. Appearance: Tan, free flowing powder

Specific Gravity: 1.25 (calculated) Percent Volatiles: Low Evaporation Rate: N/DA Odor: ammonia

SECTION 4 - FIRE & EXPLOSION DATA

FLASH POINT (Method Used): 95°C (210°F) (PMCC) FLAMMABLE LIMITS: N/D AUTOIGNITION TEMPERATURE: N/D EXTINGUISHING MEDIA: Water spray, dry chemical SPECIAL FIRE FIGHTING PROCEDURES: Protect against inhalation of combustion products. UNUSUAL FIRE & EXPLOSION HAZARDS: None identified.

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 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.

ACUTE TOXICITY DATA: Acute Oral LD50 (rats) 3.3 g/kg

Acute Dermal LD50 N/D

Acute Inhalation LC50 N/D

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PRIMARY ROUTE OF ENTRY- Inhalation.

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- 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- Not significantly toxic.

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: N/DA

SECTION 7 - 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.

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

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon when burned.

HAZARDOUS POLYMERIZATION: Will not occur.

TRIMENE BASE DLC-A

NATROCHEM MSDS SECTION 8 - SPILL OR LEAK PROCEDURES PAGE 3 OF 4

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.

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:

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).

| | AMOUNT | ACGIH | OSHA | |
|-----------------|--------|-------|-------|-------|
| INGREDIENT | | (TLV) | (PEL) | UNITS |
| Silicon Dioxide | 28% | 10 | 6 | mg/m3 |

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SARA 313 TOXIC CHEMICALS:

This product contains no toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and the Pollution Prevention Act of 1990.

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

SECTION 311/312 - HAZARD CATEGORIES:

The physical and health hazard categories for the hazardous components exceeding the de minimis amount subject to reporting under Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372

| Name of Chemical | Hazard | Percent in Product |
|------------------|--------|--------------------|
| Silicon Dioxide | Acute | 28% |
| Trimene Base | Acute | 72% |

ADDITIONAL RIGHT-TO-KNOW INFORMATION ON COMPONENTS:

None.

TRANSPORTATION INFORMATION: DOT Shipping Name: Not regulated DOT Identification Number: Not regulated

SECTION 12 - OTHER INFORMATION

Revision Note: Revised CAS number for silicon dioxide 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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