

MATERIAL SAFETY DATA SHEET
TAC DLC®-A

Date Revised: October 17, 2011

Page 1 of 4

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: TAC DLC-A
CHEMICAL NAME: Triallyl Cyanurate 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 2 - HAZARDOUS INGREDIENTS

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

<u>INGREDIENT</u>	<u>CAS REGISTRY</u>	<u>PERCENT</u>
Silicon Dioxide	112926-00-8	26-30
Triallyl Cyanurate, TAC	101-37-1	70-74
2,4,6 Triallyloxy-1,3,5-triazine		

SECTION 3 - PHYSICAL DATA

Boiling Point: 120°C (248°F) Specific Gravity: 1.259
Vapor Pressure (mm Hg): <1.3hPa @100°C Percent Volatiles: Nil
Vapor Density (Air = 1): N/DA Evaporation Rate: Not noted
Solubility in Water: 0.21g/l (20° C) Odor: mild
Appearance: Off-white, free-flowing powder above 25°C. See Section 11 for special handling precautions.

SECTION 4 - FIRE & EXPLOSION DATA

FLASH POINT (Method Used): 166°C (331°F) (COC)

FLAMMABLE LIMITS: N/A

AUTOIGNITION TEMPERATURE: Not noted

EXTINGUISHING MEDIA: Water, fog, foam, dry chemical, quenching foam - polar.

SPECIAL FIRE FIGHTING PROCEDURES: Danger of decomposition under the influence of heat.

Decomposition products: allyl alcohol. Hazardous smoke/fumes may be produced: carbon monoxide, and hydrocyanic acid. In case of fire, cool containers or take them to a safe place. Use water spray to cool unopened containers. Water used to extinguish a fire should not enter drainage systems, soil, or stretches of water. Contaminated fire-extinguishing water must be disposed of in accordance with the regulations issued by the appropriate local authorities. Fire residues should be disposed of in accordance with the regulations.

UNUSUAL FIRE & EXPLOSION HAZARDS: In the case of fire, wear a chemical protective suit and respiratory protective equipment independent of the surrounding air.

SECTION 5 - 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.

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, eye contact, skin contact and ingestion.

CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN: None

NTP: No

IARC: No

OSHA: No

EFFECTS OF EXPOSURE-

EYES- Irritating and may injure eye tissue if not removed promptly. Excessive contact with powder can cause drying of mucous membranes of eyes due to absorption of moisture and oils.

SKIN- Mildly irritating. Frequent or prolonged contact may irritate the skin.

INHALATION- Slightly toxic. 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. Negligible hazard is expected at ambient temperature. Irritating and/or toxic vapors may be released at elevated temperatures.

INGESTION- May be harmful if swallowed. Ingestion effects have not been evaluated but are assumed to cause nausea and vomiting.

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 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 ill effect or irritation develops.

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

INGESTION: Treat symptomatically and supportively. Rinse mouth with water if the person is conscious. Get medical attention. Notes to physician: No specific therapy/antidote treatment is known. If substance has been swallowed: gastric lavage; acceleration of the gastro-intestinal tract; administration of activated charcoal.

SECTION 8 - REACTIVITY DATA

STABILITY: Stable when properly stored. See section XI. Store at 27°C-32°C (80°F-90°F).

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. Strong acid, peroxides and metallic impurities.

CONDITIONS TO AVOID- Avoid elevated storage temperatures which could cause polymerization. Avoid high temperatures (>800°C) which could cause crystallization of silica.

HAZARDOUS DECOMPOSITION PRODUCTS: Highly toxic cyanide gas may be emitted when heated to decomposition.

HAZARDOUS POLYMERIZATION: Will occur. Hazardous polymerization may occur at temperatures above 60°C (140°F), or when contaminated with metals such as copper, nickel, manganese or mercury, or their compounds.

SECTION 9 - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: MINIMIZE SPILL AREA. Shut off ignition sources. Stop leak if you can do it with risk. No smoking, flames or flares in hazard area. Keep unnecessary people away. Pick up mechanically. Collect in suitable containers.

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

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: Handling can create explosive dust clouds. Eliminate ignition sources, use explosion proof equipment. Conveying and processing equipment should be spark-proof, well bonded and grounded. Avoid dust accumulations. Material will freeze and remass at ambient temperatures <25°C (<75°F). Store at 27°C-32°C (80°F-90°F). If frozen, product may be warmed before use to achieve free-flowing state. Do not allow the temperature of the material to exceed 43°C (110°F) or hazardous polymerization may occur. See Section 8. Avoid localized overheating which can lead to polymerization and exotherm. Although the polymerization tendency is greatly reduced through the addition of a polymerization inhibitor, it is best to use within six months. If stored longer, an increase in oligomeric material could occur.

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

SECTION 12 - ENVIRONMENTAL INFORMATION

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 (40 CFR 372):

This information must be included in all MSDS's that are copied and distributed for this material. Not readily biodegradable. Bioaccumulation is possible.

THE FOLLOWING INFORMATION MAY BE USEFUL IN COMPLYING WITH VARIOUS STATE AND FEDERAL LAWS AND REGULATIONS UNDER VARIOUS ENVIRONMENTAL STATUTES:

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
Triallyl Cyanurate – Acute Hazard

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

TRANSPORTATION: Not regulated. Class 9. UN-No 3077. Packaging group III. Environmentally hazardous substance, solid, N.O.S. Triallyl Cyanurate.

SECTION 13 - OTHER INFORMATION

Revision Note: updated 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

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.