

**NATROCHEM, INC.**

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**MATERIAL SAFETY  
DATA SHEET****TAIC DLC®-A**

Date Revised: June 7, 1999

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**SECTION I - PRODUCT IDENTIFICATION**

TRADE NAME: TAIC DLC-A  
CHEMICAL NAME: Triallyl isocyanurate on silicon dioxide

HMIS RATING	
Health	1
Flammability	1
Reactivity	0

**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 #	ACGIH (TLV)	OSHA (PEL)	UNITS
Silicon Dioxide	7831-86-9	10	6	mg/m <sup>3</sup>

**SECTION III - PHYSICAL DATA**

Boiling Point: 144°C  
Vapor Pressure (mm Hg): 3/144°F  
Vapor Density (Air = 1): N/A  
Solubility in Water: 0.34 wt.%(30°C)  
Appearance and Odor: Off-white, free flowing powder with non-irritating odor.

Specific Gravity: 1.315 (Calculated)  
Percent Volatiles: N/A  
Evaporation Rate: N/A

**SECTION IV - FIRE & EXPLOSION DATA**

FLASH POINT (Method Used): 245°C (PMMC)  
FLAMMABLE LIMITS: N/A  
AUTOIGNITION TEMPERATURE: N/A

EXTINGUISHING MEDIA: Water spray, dry chemical, carbon dioxide, foam.

SPECIAL FIRE FIGHTING PROCEDURES: Wear respiratory equipment and full protective clothing.

UNUSUAL FIRE & EXPLOSION HAZARDS: A small amount of Hydrogen Cyanide (HCN) will be generated from this product at incomplete combustion. In case of fire, it is important to wear respiratory equipment and full protective clothing.

**SECTION V - 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/m<sup>3</sup> 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.

MARKETED BY

**HARWICK STANDARD  
DISTRIBUTION CORPORATION**

60 S. Seiberling Street • Akron, Ohio 44305

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**SECTION V - HEALTH HAZARD DATA (cont)**

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Acute oral toxicity LD50 = 666 mg/kg (mouse. Acute oral toxicity LC50 (96 hr.) = 238 ppm (orange-red killifish)

**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.

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**SECTION VI - EMERGENCY & FIRST AID PROCEDURES**

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**EYE CONTACT:** Immediately rinse with clean water for 15 minutes. Retract eyelids often. 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 inhaled, remove victim to fresh air. If not breathing, clear victim's airway and start mouth-to-mouth artificial respiration, which may be supplemented by the use of a bag-mask respirator or manually triggered oxygen supply capable of delivering one liter per second or more. If victim is breathing, supplemental oxygen may be given from a demand-type or continuous-flow inhaler, preferably with a physician's advice. Get medical attention immediately.

**INGESTION:** If swallowed, dilute with water (by giving glasses of water to victim) then induce vomiting (by giving victim strong salty water or by sticking finger down throat). Get medical attention immediately.

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**SECTION VII - REACTIVITY DATA**

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**STABILITY:** Stable when stored properly (under 30°C in the dark).

**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. Peroxides.

**CONDITIONS TO AVOID-** Avoid high temperatures (>800 C) treatment. High temperature (above 80°C), light, polymerization catalysts.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of carbon when burned.

**HAZARDOUS POLYMERIZATION:** May occur in presence of high temperature (above 80°C), light, peroxide and polymerization catalyst.

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**SECTION VIII - SPILL OR LEAK PROCEDURES**

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**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.

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**SECTION IX - SPECIAL PROTECTION INFORMATION**

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**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.

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**SECTION X - SPECIAL PRECAUTIONS**

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**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. Avoid fire, direct sunlight, dust, oxidizing agents and metallic impurities. Store under 30°C.

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

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**SECTION XI - ENVIRONMENTAL INFORMATION**

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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
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NONE.

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

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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).

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

Silicon Dioxide- Acute Hazard

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

TRANSPORTATION: Not regulated.

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**SECTION XII - OTHER INFORMATION**

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Revision Note: Corrected acute oral toxicity LD50 = 66 mg/kg to LD50 = 666 mg/kg

Prepared by: James L. Pye, Jr.

Title: Safety Coordinator

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

N/E = Not established

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