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MATERIAL SAFETY DATA SHEET

TEA DLC®

Date Revised: April 19, 1999.

SECTION I - PRODUCT IDENTIFICATION

TRADE NAME: TEA DLC
CHEMICAL NAME: Triethanolamine on calcium silicate

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
Synthetic Calcium Silicate	1344-95-2	10	6	mg/m^3
Triethanolamine	102-71-6	5 (TWA)	N/DA	mg/m3
Diethanolamine	111-42-2	0.460 (TWA)	2 (TWA)	ppm

SECTION III - PHYSICAL DATA

Boiling Point: 650°F @ 760 mm Hg
Vapor Pressure (mm Hg): 0.010 @ 68°F
Vapor Density (Air = 1): 5.140
Solubility in Water: Completely miscible
Specific Gravity: 1.325 (Calculated)
Percent Volatiles: N/DA
Evaporation Rate: 0.01 (N-Butyl Acetate)
Appearance and Odor: Off-white, free flowing powder with ammoniacal odor.

SECTION IV - FIRE & EXPLOSION DATA

FLASH POINT (Method Used): 360°F (COC)
FLAMMABLE LIMITS: (for product) Lower than 1.3%
AUTOIGNITION TEMPERATURE: N/DA

EXTINGUISHING MEDIA: Regular foam, alcohol foam, water fog, carbon dioxide, dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Water or foam may cause frothing which can be violent and possibly endanger the life of the firefighter. Wear a self-contained breathing apparatus with a full face piece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment.

UNUSUAL FIRE & EXPLOSION HAZARDS: N/DA.

SECTION V - HEALTH HAZARD DATA

CHRONIC HEALTH EFFECTS: Prolonged and repeated exposures to concentrations of product dust in excess of PEL/TLV can cause chronic pulmonary disease.

SECTION V - HEALTH HAZARD DATA (cont)

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- May cause eye irritation. Symptoms may include stinging, tearing, and redness.

SKIN- Exposure causes skin irritation. Symptoms may include redness, burning, and skin damage.

INHALATION- Irritation and soreness in throat and nose. In extreme exposures some congestion may occur.

INGESTION- Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects; swallowing large amounts may be harmful.

SYMPTOMS OF EXPOSURE: Gastrointestinal irritation (nausea, vomiting, diarrhea), irritation (nose, throat, respiratory tract), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), abdominal pain, impaired coordination.

TARGET ORGAN EFFECTS: Overexposure to this material (or its components) has been suggested as a cause of the following laboratory animals, and may aggravate pre-existing disorders of these organs in humans; kidney damage, liver damage. Over exposure to this product (or its components) has been suggested as a cause of the following effects in humans, and may aggravate pre-existing disorders of these organs: skin sensitization.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE- Pre-existing upper respiratory and lung disease such as, but not limited to bronchitis, emphysema and asthma.

SECTION VI - 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. Launder clothing before reuse.

INHALATION: If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

INGESTION: If swallowed, seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. If individual is conscious and alert, induce vomiting by giving syrup of ipecac or by gently placing two fingers at the back of the throat. If possible, do not leave individual unattended.

SECTION VII - REACTIVITY DATA

STABILITY: Stable. This product should not be heated above 140°F in the presence of aluminum due to excessive corrosion and potential chemical reaction releasing flammable hydrogen gas.

MATERIALS TO AVOID- Hydrofluoric acid, acrylates, aldehydes, ketones, organic anhydrides, organic halides, strong acids, strong alkalies, strong oxidizing agents.

CONDITIONS TO AVOID- N/DA

HAZARDOUS DECOMPOSITION PRODUCTS: May form oxides of carbon, oxides of nitrogen. This material starts to decompose between 500 and 600°F.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VIII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: MINIMIZE SPILL AREA. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank, sweep up solids into containers.

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

SECTION IX - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Use a respirator such as 3M 9900 or equivalent for protection against pneumoniosis.

VENTILATION: Use sufficient natural or mechanical ventilation to keep dust level below PEL.

PROTECTIVE GLOVES: Wear resistent gloves such as: polyvinyl chloride, butyl rubber.

EYE PROTECTION: Chemical goggles.

OTHER PROTECTIVE EQUIPMENT: Impervious clothing, boots, eye wash and safety shower.

SECTION X - SPECIAL PRECAUTIONS

HANDLING AND STORAGE: Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Combination of nitrites or oxides of nitrogen with secondary or tertiary amines can form nitrosamines which are potential carcinogens. Warning! Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

OTHER PRECAUTIONS: Keep from freezing.

SECTION XI - REGULATORY INFORMATION

TOXIC SUBSTANCE CONTROL ACT (TSCA):

The components of this product are contained on the Inventory of the Toxic Substance Control Act.

SARA TITLE III INFORMATION:

SECTION 313 - TOXIC CHEMICALS:
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
111-42-2	Diethanolamine	0.72

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

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES:
This product does not contain an extremely hazardous substance.

SECTION 311/312 - HAZARD CATEGORIES:
The physical and health hazard categories for this product are:

Fire Hazard:
Sudden Release of Pressure Hazard:
Reactivity Hazard:
Immediate (Acute) Health Hazard: Calcium silicate - 28%, Triethanolamine - 71.28%
Delayed (Chronic) Health Hazard: Triethanolamine - 71.28%

TRANSPORTATION INFORMATION:
DOT Shipping Name: Non-regulated.
DOT Identification Number:

SECTION XII - OTHER INFORMATION

Revision Note: Review of Raw Material MSDS(s).

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

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