

MATERIAL SAFETY DATA SHEET


DEA DLC®

Date Revised: June 20, 2000

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SECTION I - PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: DEA DLC
CHEMICAL NAME: Diethanolamine on Calcium Silicate

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 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 REGISTRY	PERCENT
Calcium Silicate	1344-95-2	30
Diethanolamine	111-42-2	70

SECTION III - PHYSICAL DATA

Boiling Point: 514EF

Specific Gravity: 1.272

Vapor Pressure (mm Hg): <0.01

Percent Volatiles: N/A

Vapor Density (Air = 1): 3.60

Evaporation Rate: <0.01

Solubility in Water: Insoluble

Appearance and Odor: Off-white, free flowing powder with slight alkanolamine odor.

SECTION IV - FIRE & EXPLOSION DATA

FLASH POINT (Method Used): >300EF (PMCC)

FLAMMABLE LIMITS: N/DA

AUTOIGNITION TEMPERATURE: N/DA

EXTINGUISHING MEDIA: Regular foam or alcohol foam or carbon dioxide or dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Water or foam may cause frothing which can be violent and possibly endanger the life of firefighter, especially if sprayed into containers of hot, burning liquid. Water may be used to keep fire-exposed containers cool until fire is out. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.

UNUSUAL FIRE & EXPLOSION HAZARDS: This material starts to decompose between 500 and 600EF.

SECTION V - PERMISSIBLE EXPOSURE LIMITS

Calcium Silicate: 5 mg/m³ respirable nuisance dust, OSHA. 10 mg/m³ total nuisance dust, ACGIH.

Diethanolamine: Permissible exposure limit (PEL) 3 ppm. Threshold limit value (TLV) 3 ppm.

SECTION VI - HEALTH HAZARD DATA

REPEATED EFFECTS OF OVEREXPOSURE: Prolonged or repeated exposure to excessive concentrations of this product dust or any nuisance dust can cause chronic pulmonary disease.

PRIMARY ROUTE OF ENTRY- Inhalation, dust contact with eyes, SKIN.

CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN: None.

NTP: No **IARC:** No **OSHA:** No

EFFECTS OF EXPOSURE-

EYES- Exposure may cause severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and eye damage.

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

INHALATION- Irritation and soreness in throat & nose. In extreme exposures, some congestion may occur. May cause transitory upper respiratory irritation. Significant overexposure can result in kidney and liver damage.

INGESTION- Can cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

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

SECTION VII - EMERGENCY & FIRST AID PROCEDURES

EYE CONTACT: Immediately rinse with clean water for 20 minutes. Retract eyelids often. Seek immediate medical attention.

SKIN CONTACT: Immediately remove contaminated clothing. If skin is damaged, apply a clean dressing and seek immediate medical attention. If skin is not damaged, wash exposed area with soap and water. Seek medical attention if ill effect or irritation develops.

INHALATION: If effected, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped give artificial respiration. Keep person warm, quiet, and get medical attention.

INGESTION: Immediately drink two glasses of water and induce vomiting by either giving IPECAC syrup or by placing finger at back of throat. Never give anything by mouth to an unconscious person. Get medical attention.

Diethanolamine caused harm to the fetus (inborn pup) in a laboratory study. The relevance of this finding to humans is uncertain. Exposure to this material (or its components) has apparently been found to cause the following effects in laboratory animals: Nervous system effects, cardiac abnormality, kidney damage, liver abnormalities, blood abnormalities.

SECTION VIII - REACTIVITY DATA

STABILITY: Stable

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

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

HAZARDOUS DECOMPOSITION PRODUCTS: May form toxic materials: oxides of carbon, oxides of nitrogen, etc.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION IX - 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 X - 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: Chemical Safety goggles.

OTHER PROTECTIVE EQUIPMENT: Protective impervious clothing, eye wash station, safety shower.

SECTION XI - 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.

Combination of nitrites or oxides of nitrogen with secondary or tertiary amines can form nitrosamines which are potential carcinogens.

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

SECTION XII - ENVIRONMENTAL INFORMATION

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	72

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

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

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):

Calcium Silicate- Acute hazard

Diethanolamine- Acute and chronic hazard

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

TRANSPORTATION: Not regulated.

SECTION XIII - OTHER INFORMATION

Revision Note: Added CHEMTREC information.

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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