

MATERIAL SAFETY DATA SHEET


SARET 515 DLC®-A

Date Revised: June 22, 2000

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SECTION I - PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: Saret 515 DLC-A
CHEMICAL NAME: Saret 515 crosslinking agent on silicon dioxide

Company:  NATROCHEM, INC.
P.O. Box 1205
Savannah, GA 31402-1205

HMIS RATING	
Health	2
Flammability	1
Reactivity	2

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
Nitroso Aromatic Amine	Proprietary	2.9
Silicon Dioxide	7631-86-9	28

SECTION III - PHYSICAL DATA

Boiling Point: 200° F
Vapor Pressure (mm Hg): N/DA
Vapor Density (Air = 1): N/DA
Solubility in Water: Negligible
Appearance and Odor: Yellow, free-flowing powder with mild odor.

Specific Gravity: 1.224
Percent Volatiles: Negligible
Evaporation Rate: N/DA

SECTION IV - FIRE & EXPLOSION DATA

FLASH POINT (Method Used): > 200° F (PMCC)
FLAMMABLE LIMITS: N/DA
AUTOIGNITION TEMPERATURE: N/DA
EXTINGUISHING MEDIA: Dry chemical, CO₂, foam, water fog, water spray.

SPECIAL FIRE FIGHTING PROCEDURES: Do not enter fire area without proper protection. Fight fire from safe distance and protected location. Heat and impurities may increase temperature, build pressure, rupture closed containers, spreading fire, increasing risk of burns and injuries. Water may be ineffective in firefighting due to low solubility. Use water spray and/or fog for cooling. Pressure relief system may plug with solids, increasing risk of overpressure. Notify authorities if liquid enters sewers and/or public waters.

UNUSUAL FIRE & EXPLOSION HAZARDS: High temperatures, inhibitor depletion, accidental impurities, exposure to radiation, oxidizers may cause spontaneous polymerizing reaction, generating heat and pressure. Closed containers may rupture and explode during runaway polymerization.

SECTION V - PERMISSIBLE EXPOSURE LIMITS

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.

SECTION VI - HEALTH HAZARD DATA

CHRONIC HEALTH EFFECTS: Silicon Dioxide: 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 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.

PRIMARY ROUTE OF ENTRY- Inhalation, Eye, and Skin.

CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN: Nitroso Aromatic Amine

NTP: No IARC: Yes 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- This material has been shown to be a moderate skin irritant and an allergic sensitizer in susceptible individuals upon repeated exposure. This material is expected to be a health hazard by skin absorption.

INHALATION- Nuisance dust. Excessive contact with powder can cause drying of mucous membranes of nose and throat due to absorption of moisture and oils. Aerosols or vapors which may be generated at elevated processing temperatures, may cause respiratory tract irritation. Symptoms of irritation may include coughing, mucous production and shortness of breath.

INGESTION- Not significantly toxic. Although no appropriate human or animal health effects data are known to exist, this material is not expected to be an ingestion hazard.

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. This material or its emissions may induce an allergic or sensitization reaction and thereby aggravate systemic disease.

SECTION VII - 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 immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.

INGESTION: Ingestion unlikely. However, if ingested, obtain emergency medical attention.

EMERGENCY MEDICAL TREATMENT PROCEDURES: If exposed, treat skin and eye burns or irritation conventionally after decontamination. Remove clothing and rinse skin with water. Look for burns or signs of allergic reaction.

SECTION VIII - REACTIVITY DATA

STABILITY: Stable. Unstable (reactive) upon loss of inhibitor.

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 oxidizers, strong reducers, free radical initiators, inert gases, oxygen scavengers.

CONDITIONS TO AVOID- Avoid high temperatures (>800° C) treatment. High temperatures, localized heat sources (i.e., drum or band heaters), oxidizing conditions, freezing conditions, direct sunlight, ultraviolet radiation, inert gas blanketing.

HAZARDOUS DECOMPOSITION PRODUCTS: Acrid smoke, fumes. Oxides of carbon may be released upon thermal decomposition.

HAZARDOUS POLYMERIZATION: May 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. Report per regulatory requirements.

WASTE DISPOSAL METHOD: Non-contaminated, properly inhibited product is not a RCRA hazardous waste. However, contaminated product, soil, or water may be RCRA/OSHA Hazardous Waste due to potential for internal heat generation (See 40 CFR 261 and 29 CFR 1910). It is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste. Comply with all applicable federal, state and local regulations. Landfill solids at permitted sites. Use registered transporters. Burn concentrated liquids in systems that use compatible fuel. Dilute with clean, low viscosity fuel. Avoid flameouts. Assure emissions comply with local, state, and federal regulations. Dilute aqueous waste may biodegrade. Avoid overloading and poisoning plant biomass. Assure effluent complies with applicable 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: Safety goggles.

OTHER PROTECTIVE EQUIPMENT: Protective 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.

SECTION XI - SPECIAL PRECAUTIONS (cont)

Unless inhibited, product can polymerize, raising temperature and pressure, possibly rupturing container. Do not blanket or mix with oxygen-free gas as it renders inhibitor ineffective. Prevent freezing; inhibitor separates as solid. If frozen, material must be warmed and remixed gently (<90° F). Prevent moisture contact. Store in tightly closed containers, away from heat, sparks, open flames, strong oxidizers, radiation, and other initiators. Prevent contamination by foreign materials. Use only non-sparking tools and limit storage time.

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
Proprietary	Nitroso Aromatic Amine	0.27

This information must be included in all MSDS' 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 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

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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