

MATERIAL SAFETY DATA SHEET

SR 206 DLC®-A


Date Revised: July 7, 2007

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1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

TRADE NAME: SR 206 DLC-A

CHEMICAL NAME: ethylene glycol dimethacrylate on silicon dioxide

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

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)

2. COMPOSITION AND INFORMATION ON INGREDIENTS

Component	CAS#	PERCENT
Ethylene Glycol Dimethacrylate	97-90-5	72
Precipitated Silica	112926-00-8	28

Contains no detectable crystalline silica (detection limit <0.01% by weight).

3. HAZARDS IDENTIFICATION

Physical Hazards: Unstable (reactive) upon depletion of inhibitor.

Acute Health Effects: suspect respiratory tract irritation hazard; eye irritant; slight skin absorption hazard; moderate skin irritant; skin sensitizer; slight ingestion hazard.

Chronic Health Effects: (See Section 11.)

HMIS: 2-1-1

CAUTION: Dust may be irritating to eyes and upper respiratory tract. Prolonged or repeated skin contact may cause irritation due to drying action.

Precautions: Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Avoid prolonged, repeated or excessive inhalation. Use only with adequate ventilation. Ventilation must be sufficient to limit employee exposure to this product below permissible exposure limits. Wear respiratory protection when dust exposure is above permissible exposure limits. Wash thoroughly every day after work. Do not eat, drink or smoke in work area.

4. FIRST AID MEASURES

INHALATION: Remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult. If symptomatic, contact a poison control center, emergency room or physician for treatment information.

EYE CONTACT: Remove contact lens and pour a gentle stream of warm water through the affected eye for at least 15 minutes. Retract eyelids often. If irritation persists, contact a poison control center, emergency room or physician as further treatment may be necessary.

SKIN CONTACT: Remove contaminated clothing. Run a gentle stream of water over the affected area for 15 minutes. A mild soap may be used if available. If any symptoms persist, contact a poison control center, emergency room or physician as further treatment may be necessary.

INGESTION: If a large quantity is swallowed, give lukewarm water (a pint) if the victim is completely conscious and alert. Do not induce vomiting or risk of damage to lungs may exceed the risk of poisoning. Contact a poison control center, emergency room or physician for treatment information.

5. FIRE FIGHTING MEASURES

FLASH POINT: 93C (200F) PMCC

EXTINGUISHING MEDIA: Dry chemical, CO₂, foam, water spray/water fog for cooling.

SPECIAL FIREFIGHTING PROCEDURES: Spontaneous polymerization reaction may be caused by high temperatures, inhibitor depletion, accidental impurities, or exposure to radiation or oxidizers. Do not enter fire area without proper protection. Water may be ineffective in firefighting due to low solubility. Use water spray/fog for cooling. Do not allow material to enter sewer or public waters.

6. ACCIDENTAL RELEASE MEASURES

Spilled or released material may polymerize and release heat and gasses. Extinguish all ignition sources and ventilate the area. Wear protective equipment during clean-up. Dike and recover large spills. Wash the spill area with a strong detergent and water solution; rinse with water but minimize water during cleanup. Dispose per regulatory requirements. See Section 13 for disposal information.

7. HANDLING AND STORAGE

Store in a dry area. Wear appropriate protective equipment when handling this material. See Section 8. Product may be heated to 60C (140F) for not more than 24 hours. Do not use localized heat sources. Do not use steam. Use a hot box or hot room set to a maximum temperature of 60C (140F). Do not overheat or compromise of product quality may occur. Do not overheat or uncontrolled, hazardous polymerization may occur. If product freezes, heat as indicated above. Product should be consumed in its entirety after heating. Avoid multiple "re-heats" which may affect quality or result in degradation. Product is packaged with inhibitor(s). Unless inhibited, the product can polymerize, raising temperature and pressure and possibly rupturing the container. Check inhibitor content periodically, adding if needed. In addition, inhibitors require the presence of dissolved oxygen. Maintain at least the original headspace in the container and do not blanker or mix with oxygen-free gas as this renders the inhibitor ineffective. Ensure air space (oxygen) is present during product heating. Store indoors at temperatures greater than 0C (32F) and below 38C (100F). Avoid prolonged storage longer than shelf-life. Store in tightly closed containers in a properly vented storage area away from heat, sparks, open flame, strong oxidizers, radiation, and other initiators. Prevent contamination by foreign materials. Prevent moisture contact. Use only non-sparking tools and limit storage time. Unless specified elsewhere, shelf-life is 6 months from date of manufacture printed on the label. When transferring material use proper grounding to avoid electrical sparks. Surface alterations caused by calcining or mixing with additives may alter toxicological properties.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

A PEL or TLV has not been established for the acrylate portion of this product. The following information is available for the silica portion of this product.

Exposure Limits: 8-hour Time Weighted Average (TWA); 15-minute Short-Term Exposure Limit (STEL)

OSHA: 6 mg/m³ (total dust) TWA.

ACGIH: 10 mg/m³ (total amorphous dust) TWA. 3 mg/m³ (respirable nuisance particulate) TWA.

RESPIRATORY PROTECTION: Use NIOSH approved dust filter respirator for exposure above permissible exposure limits. The respiratory use limitations made by NIOSH or the manufacturer must be observed.

VENTILATION: General or local exhaust sufficient to maintain employee exposure below permissible exposure limits.

EYE AND FACE PROTECTION: If eye exposure to powder is likely, use tight fitting protective goggles. Contact lenses should not be worn.

PROTECTIVE GLOVES: Cloth, leather or rubber.

OTHER PROTECTIVE EQUIPMENT: Boots, aprons, or chemical suits should be used when necessary to prevent skin contact. This equipment must be cleaned thoroughly after each use.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: NA	VAPOR DENSITY (Air=1): NA
SPECIFIC GRAVITY (Water = 1): 1.21	FREEZING/MELTING POINT: NA
SOLUBILITY (wt.% in water): Insoluble	% VOLATILE: NA
VAPOR PRESSURE: NA	EVAPORATION RATE: NA
PHYSICAL STATE: powder	ODOR: slight organic
COLOR: off-white	

10. STABILITY AND REACTIVITY

STABILITY: Stable when stored properly.

HAZARDOUS POLYMERIZATION: Hazardous polymerization may occur upon depletion of inhibitor.

INCOMPATIBILITY: Avoid calcining temperatures (>800°C) which may result in crystalline formation. Mixing with additives and alteration of product properties may alter toxicological properties.

HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS:

Acrid smoke and fumes, carbon monoxide, carbon dioxide and other toxic vapors may be released during a fire involving this product.

11. TOXICOLOGICAL INFORMATION

SKIN IRRITATION: Extensive / prolonged or repeated exposure to this material can result in significant absorption. Moderate skin irritant and an allergic sensitizer. Symptoms of irritation may include redness or rash, swelling of the affected area and blistering. Prolonged skin contact may result in a more severe skin response. Symptoms may be delayed.

EYE IRRITATION: May cause eye irritation. Symptoms may include burning sensation, tearing, redness or swelling.

CARCINOGENICITY: Chronic Health Effects: The active ingredient in this material, SR206, was tested positive for mutagenicity in the mouse lymphoma assay but negative in the Ames test. There is reason to believe that the mouse lymphoma assay was a false positive finding. It should be noted that this assay system produces a high incidence of false responses.

EFFECTS OF OVEREXPOSURE:

ACUTE: Excessive contact with powder can cause drying of mucous membranes of nose, eyes, and throat due to absorption of moisture and oils. This material can also cause nasal irritation and nosebleeds. Eye contact with powder can result in mild irritation.

CHRONIC: An epidemiological study was conducted which included 165 precipitated silica workers who had been exposed an average time span of 8.6 years. Of these 165 workers, 44 had been exposed for an average of 18 years. No adverse effects were noted in complete medical examinations (including chest roentgenograms) of these workers. Pulmonary function decrements were correlated only with smoking and age but not with the degree of duration of dust exposures. Laboratory studies have also been conducted in small animals via inhalation to levels of precipitated silica dust of up to 126 mg/m³ per 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 the studies performed by, or known to, PPG indicate a very low order of pulmonary activity for synthetic precipitated silica. PPG recommends that 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.

IARC reviewed the data on amorphous silica in 1996 and concluded there was inadequate evidence from both epidemiology and experimental studies that amorphous silica is a carcinogenic risk factor. The organization concluded that amorphous silica is in Group 3.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: Do not allow product to reach ground water, water course or sewage systems.

EC₀: >1000 ppm (daphnia magna) (24-hour acute immobilization test) Silica: Slight to very low toxicity.

EC₀: >10,000 ppm (rainbow trout) (4-day static study) Silica: Slight to very low toxicity.

EC₀: >10,000 ppm (freshwater fish (96-hour static acute toxicity study) Silica: Slight to very low toxicity.

ENVIRONMENTAL FATE:

No data at this time.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Waste from this product may be disposed of in a sanitary landfill if state and local regulations permit. Care should be taken to avoid creation of dust during disposal operations. Non-contaminated, properly inhibited product is not a RCRA hazardous waste. However, contaminated product may be hazardous due to the potential for internal heat generation. (See 40CFR261 and 29CFR1910.) 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. Use registered transporters. Disposal options include landfilling solids at permitted sites, fuel blending or incinerating. Assure emissions comply with applicable regulations. Dilute aqueous waste may biodegrade; avoid overloading/poisoning plant biomass. Assure effluent complies with applicable regulations.

14. TRANSPORT INFORMATION

Proper Shipping Name: Not regulated; Hazard Class: Not regulated.

15. REGULATORY INFORMATION

USA TSCA: All components of this product are listed, or excluded from listing, on the TSCA inventory. Synthetic amorphous silica is listed on the TSCA Inventory as its general CAS# 7631-86-9

EUROPE EINECS: Synthetic amorphous silica is listed on EINECS (231-545-4) as its general CAS#7631-86-9

CANADA DSL: This product and/or all of its components are listed on the Canadian DSL.

AUSTRALIA AICS: All components of this product are listed on AICS.

KOREA ECL: All components of this product are listed on KECI.

JAPAN MITI (ENCS): All components of this product are listed on the ENCS.

PHILIPPINES PICCS: All components of this product are listed on the (PICCS).

SARA TITLE III:

SARA (311,312) Hazard Class: Silicon Dioxide – Acute Health Hazard.

SARA (313) Chemicals: Not listed.

SARA Section 302: Not listed as an Extremely Hazardous Substance.

CERCLA: Not listed.

16. OTHER INFORMATION

Revision Date: July 9, 2007

Revision Note: Corrected chemical name; updated all sections.

Prepared by: Craig Moore

NA = Not applicable ND = Not determined NDA = No Data Available NE = Not established

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