MATERIAL SAFETY DATA SHEET SF96-350 DLC®-A

Date Revised: October 18, 2012

Page 1 of 5

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HMIS RATING

REACTIVITY

HEALTH **FLAMMABILITY**

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: SF96-350 DLC-A

CHEMICAL NAME: Poly DiMethyl Siloxane on silicon dioxide

Company:



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

Telephone Numbers:

Transportation Emergencies:

(800) 424-9300 (24 hours) CHEMTREC (U.S.A.):

CHEMTREC (International): (202) 483-7616 (24 hours, call collect)

Product Information: (912) 236-4464 (EST, 8:00 a.m. - 4:00 p.m. M-F)

SECTION 2 - Hazards Identification

The components of this material are not considered hazardous by the OSHA Hazard Communication Standard, 29CFR1910.1200.

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.

INGESTION: If swallowed, do not induce vomiting. Give a glass of water. Rinse mouth with water several times. Consult a physician.

COMPONENT NAME	CAS#	<u>PEL</u>	TLV	<u>TWA</u>
Silicon Dioxide	1112926-00-8	N/DA	N/DA	6mg/m3 (OSHA) 10mg/m3 (ACGIH)
Poly DiMethyl Siloxane Element 14 PDMS-350	63148-62-9	NE	NE	NA

SECTION 4 – First aid measures

INHALATION: If overcome by exposure, remove victim to fresh air.

INGESTION: If swallowed, do not induce vomiting. Give a glass of water. Rinse mouth with water several times. Consult a physician.

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.

FLASH POINT (Method Used): .>300°C (>572°F) (PMCC)

FLAMMABLE LIMITS: N/A

AUTOIGNITION TEMPERATURE: N/A

EXTINGUISHING MEDIA: Dry chemical, CO₂, foam, or water spray

SPECIAL FIRE FIGHTING PROCEDURES: None Known.

UNUSUAL FIRE & EXPLOSION HAZARDS: Firefighters must wear NIOSH/MSDHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

SECTION 6 – Accidental release measures

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. Prevent runoff from entering drains, sewers, or streams.

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 7 - Handling and storage

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.

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

STORAGE: keep container tightly closed in a dry, cool, well-ventilated place.

SECTION 8 – Exposure controls / personal protection

Engineering controls: Eyewash facilities and emergency shower must be available when handling this product. Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protections may be needed for non-routine emergence situations.

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/m3 for periods from six months to two years. Although precipitated silica was temporarily deposited in the animal's 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.

SF96-350 DLC-A	NATROCHEN	/ MSDS		PAGE 3 OF 5
COMPONENT NAME	CAS#	PEL	TLV	TWA
Silicon Dioxide	1112926-00-8	N/DA	N/DA	6mg/m3 (OSHA)
				10mg/m3 (ACGIH)
Poly DiMethyl Siloxane	63148-62-9	NE	NE	NA
Element 14 PDMS-350				

PRIMARY ROUTE OF ENTRY- Inhalation & eyes

SECTION 9 - Physical and chemical properties

Boiling Point: >200°C (>392°F) Vapor Pressure (mm Hg): 1 Vapor Density (Air = 1): >1 Solubility in Water: Insoluble

Evaporation Rate: >1.0

Specific Gravity: 1.133

Odor: odorless

Percent Volatiles: <1

Appearance: Off-white powder

SECTION 10 – Stability and reactivity

STABILITY: Stable.

MATERIALS TO AVOID- Avoid alteration of product properties before reuse. Avoid calcining, which may result in crystalline formation. Avoid mixing with additives that may alter toxicological properties.

CONDITIONS TO AVOID- Avoid high temperature treatment >800°C.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon & formaldehyde when burned. This product contains methyl polysiloxanes which can generate formaldehyde at approximately 150C (300F) and above in atmospheres that contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard. The MSDS for formaldehyde is available from Momentive.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 – Toxicological information

TOXIC SUBSTANCE CONTROL ACT (TSCA): The components of this product are contained on the Inventory of the Toxic Substance Control Act.

CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN: None

NTP: No OSHA: No IARC: No

TOXICITY: LD50 LC50

acute oral >5g/kg Silicon Dioxide Acute Inhalation: Nuisance dust

Dimethylpolysiloxane acute oral, >5,000 mg/kg (rat) Acute Inhalation: >535 mg/l (rat)

Acute Dermal LD50; Rabbit >10,000 mg/kg

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.

OTHER: This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300° F and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard.

SENSITIZATION: Test type: Magnusson-Kligmann; Species: Guinea Pig; Result: negative. Method: OECD-Guideline 406 (Skin Sensitization). Did not cause sensitization on laboratory animals.

Mutagenicity: Negative in the Ames test.

SECTION 12 – Ecological information

Ecotoxicity: No data available.
Distribution: No No data available.
Chemical Fate: No data available.

SECTION 13 – Disposal considerations

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

SECTION 14 – Transport information

TRANSPORTATION INFORMATION: This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.

DOT Shipping Name: Not regulated

SECTION 15 –Regulatory information

CHEMICAL INVENTORIES: The components of this product are listed on the following inventories:

Australia AICS
European EU
Japan ENCS
China IECS
Korea KECI
Canada DSL
Philippines PICCS
USA TSCA

OSHA: The component(s) listed below is identified as a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

	AMOUNT	ACGIH	OSHA	
INGREDIENT		(TLV)	(PEL)	UNITS
Silicon Dioxide	28%	10	6	mg/m3

SARA 313 TOXIC CHEMICALS:

This product does not contain toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and the Pollution Prevention Act of 1990. This information must be included in all MSDS' that are copied and distributed for this material.

SECTION 311/312 - HAZARD CATEGORIES:

The physical and health hazard categories for the hazardous components exceeding the de minimis amount subject to reporting under Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372

Percent in Product Name of Chemical Hazard 28%

Silicon Dioxide Acute

ADDITIONAL RIGHT-TO-KNOW INFORMATION ON COMPONENTS: None Known.

SECTION 16 –Other Revision Note: Update silica CAS. Review and reissue. Prepared by: Craig Moore

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

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