NuSil Technology
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MATERIAL SAFETY DATA SHEET
EFFECTIVE DATE: 10/20/97

EMERGENCY PHONE NUMBERS:	(800) 424-9300 **CHEMTREC** (805) 684-8780
OUTSIDE OF THE U.S.	(703) 527-3887 **CHEMTREC**

NuSil Technology urges each customer or recipient of this MSDS to study it carefully to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology, and fire prevention, as necessary or appropriate to the use and understanding of the data contained in this MSDS.

To promote safe handling, each customer or recipient should: (1) notify its employees, agents, contractors, and others whom it knows or believes will use this material of the information regarding hazards or safety; (2) furnish this same information to each of its customers for the product; and (3) request its customers to notify their employees, customers and other users of the product of this information.

I. IDENTIFICATION

PRODUCT NAME: **MED10-6640 Part B**
CHEMICAL NAME: N/A
CHEMICAL FAMILY: Silicone Dispersion
FORMULA: N/A
MOLECULAR WEIGHT: N/A
SYNONYMS: N/A
CAS # : Mixture

II. PHYSICAL DATA (Based on typical material)

BOILING POINT: 281° F
SPECIFIC GRAVITY (H_2O=1): 0.93
FREEZING POINT: N/A
VAPOR PRESSURE @ 100°F: 21 mm Hg
VAPOR DENSITY (air=1): 3.7
EVAPORATION RATE (Butyl Acetate=1): 0.7
SOLUBILITY IN WATER (By wt): Negligible
APPEARANCE: Translucent
ODOR: Solvent.
PHYSICAL STATE: High viscosity liquid
PERCENT VOLATILES (by wt): See Section X

Note: The above information is not intended for use in preparing product specifications.

III. HAZARDOUS INGREDIENTS (as defined in 29 CFR 1910.1200)

%	MATERIAL	CAS NUMBER	EXPOSURE LIMIT
75	Xylene	01330-20-7	See Section V
5	Silica, amorphous	68909-20-6	See Section V

See Section X for chemicals appearing on Federal or State Right-To-Know lists.

IV. FIRE AND EXPLOSION DATA

FLASH POINT (test method(s)): 79°F (Tag Closed Cup)

FLAMMABLE LIMITS IN AIR (by volume):
LOWER: 1% UPPER: 7%

EXTINGUISHING MEDIA:
Use alcohol-type or universal-type foams applied by manufacturer's recommended techniques for large fires. Use carbon dioxide or dry chemical for small fires.

SPECIAL FIRE FIGHTING PROCEDURES:
Do not spray a solid stream of water or foam directly into a pool of hot, burning liquid as this may cause frothing, and may intensify the fire. Use self-contained breathing apparatus when fighting fire in an enclosed area.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Vapors form from this product and may travel or be moved by air currents and ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharges or other ignition sources at locations distant from product handling point. Vapors from this product may settle in low or confined areas or travel a long distance to an ignition source and flash back explosively.

Flammable liquid. Vapor may be ignited by static sparks. Use proper bonding and grounding during liquid transfer as described in National Fire Protection Association document NFPA 77.

V. HEALTH HAZARD DATA

TLV AND SOURCE:
Xylene : 100 ppm - 8 hours TWA (ACGIH, OSHA, NIOSH)
150 ppm - STEL (ACGIH, OSHA, NIOSH)

Silica: 10 mg/m^3 - 8 hours TWA (ACGIH)
6 mg/m^3 - 8 hours TWA (OSHA)
6 mg/m^3 - 8 hours TWA (NIOSH)

EFFECTS OF SINGLE OVEREXPOSURE:
SWALLOWING:
Slightly toxic. May cause a burning sensation in the stomach, plus nausea and vomiting. Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury.

SKIN ABSORPTION:
Prolonged or widespread skin contact may result in absorption of potentially harmful amounts of material.

INHALATION:
Causes upper respiratory tract irritation, experienced as discomfort in the nose and throat, and discharge from the nose; respiratory irritation, experienced as cough, chest discomfort, production of sputum, difficulty with breathing, pulmonary edema and hemorrhage; headache, nausea, dizziness, drowsiness, weakness, confusion, disturbed vision,

ringing in ears, difficulty in walking and coma. Prolonged inhalation of high concentrations can cause liver and kidney degenerative lesions and depression of bone marrow activity.

SKIN CONTACT:
Prolonged contact can cause local redness with drying and cracking of the skin due to a defatting action.

EYE CONTACT:
Liquid causes severe irritation, experienced as discomfort or pain, excess blinking and tear production, with marked excess redness and swelling of the conjunctiva. Corneal injury may occur.

Vapor or mist may be irritating, experienced as discomfort, excess blinking and tear production, with excess redness of the conjunctiva.

EFFECTS OF REPEATED OVEREXPOSURE:
Long-term exposure to xylene can cause chronic headache, chest pain, nausea, mental confusion, breathing difficulties, heartbeat abnormalities, numbness in limbs, fever, reduced white blood cell count, malaise, and fatigue. Skin irritation can occur. Repeated exposure to high concentrations may cause injury to bone marrow, liver and kidneys.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:
Because of its irritating and defatting properties, this material may aggravate an existing dermatitis. Breathing of vapor or mist may aggravate asthma and inflammatory or fibrotic pulmonary disease.

SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH HAZARD EVALUATION:
Xylene has been shown to cause embryofetal toxicity and birth defects in laboratory animals, but only at doses which also cause maternal toxicity. There is no information available with respect to its' possible developmental effects in humans.

Animals exposed repeatedly to high vapor concentrations (800 ppm or greater) of mixed xylenes suffered hearing loss.

OTHER EFFECTS OF OVEREXPOSURE:
None currently known.

EMERGENCY AND FIRST AID PROCEDURES:
SWALLOWING:
Do not induce vomiting. Do not give anything to drink. Obtain medical attention without delay.

SKIN:
Remove contaminated clothing and wash skin with soap and water. Wash clothing before reuse. Discard shoes. If irritation persists, seek the advice of a physician.

INHALATION:
Remove to fresh air. Give artificial respiration if not breathing. Oxygen may be given by qualified personnel if breathing is difficult. Obtain medical attention.

EYES:
Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention if symptoms persist.
NOTES TO PHYSICIAN:
If only a small amount of this product has been ingested and if there is likely to be a significant delay before emergency medical help is available, then in the absence of signs and symptoms of CNS depression or convulsions, and when the gag reflex is intact, ipecac may be used to produce vomiting. If vomiting is induced, the patient's head and upper body must be kept at a lower level than the hips to assist in the prevention of aspiration. Aspirated material may cause severe lung damage and present a significant hazard.

If a significant quantity of product is ingested, remove by means of gastric lavage using activated charcoal. A cuffed endotracheal tube should be used to prevent aspiration.

When evacuation of the stomach is complete, 30-60 ml of Fleet's Phospho-Soda diluted 1:4 in water may be given. Keep the patient under observation for 24 hours and check for signs of lung injury. It may require 2-4 weeks for resolution of lung infiltrates involving more than 30% of the lung volume.

VI. REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Avoid open flames and ignition sources.

INCOMPATIBILITY: Avoid strong oxidizing sources.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:
Burning can produce carbon monoxide, carbon dioxide, and oxides of silicon. Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant. Acute overexposure to the products of combustion may result in irritation of the respiratory tract.

HAZARDOUS POLYMERIZATION: Will not occur.

VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
Extinguish and do not turn on any ignition source until the area is determined to be free from explosion or fire hazards. See section IV, "Unusual Fire and Explosion Hazards".

Spills should be contained. Large spill removed by vacuum. Smaller spills may be soaked up with absorbent material.

WASTE DISPOSAL METHOD: Dispose of in accordance with all Federal, State, and local regulations.

VIII. SPECIAL PROTECTION

RESPIRATORY PROTECTION: Use approved respirator or self-contained breathing apparatus as needed to maintain personnel exposure below established TLV.

VENTILATION: General (mechanical) room ventilation with local ventilation as needed to maintain exposure below established TLV.

PROTECTIVE GLOVES: Use solvent resistant gloves.

EYE PROTECTION: Use safety goggles.

OTHER PROTECTIVE EQUIPMENT: Eye wash and safety shower.

IX. SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
WARNING!
Flammable
Harmful if swallowed/inhaled/absorbed through skin.
Causes skin and eye irritation
May cause dizziness and drowsiness
May cause liver, kidney, & nervous system damage.
Repeated overexposure may cause loss of hearing.
Aspiration may cause lung damage

Keep away from heat, sparks, and flame.
Keep container closed
Use with adequate ventilation
NOTE: DO NOT INDUCE VOMITING

Avoid contact with eyes, skin, and clothing.
Avoid breathing vapor or mist.
Wash thoroughly after handling

OTHER PRECAUTIONS:
HMIS FORMAT:
Health: 2 Flammability: 3 Reactivity: 0

WARNING: Hot organic chemical vapors or mists are susceptible to sudden spontaneous combustion when mixed with air. Ignition may occur at temperatures below those published in the literature as "autoignition" or "ignition" temperatures. Ignition temperatures decrease with increasing vapor volume and vapor / air contact time, and are influenced by pressure changes.

Ignition may occur at typical elevated-temperature process conditions, especially in processes operating under vacuum if subjected to sudden ingress or air, or outside process equipment operating under elevated pressure if sudden escape of vapors or mists to the atmosphere occurs.

Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

X. REGULATORY INFORMATION

STATUS ON SUBSTANCE LISTS:
The concentrations shown are maximum or ceiling levels (weight %) to be used for calculations for regulations. Trade Secrets are indicated by "TS".

FEDERAL EPA

Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of Hazardous Substances equal to or greater than the reportable quantities (RQ's) in 40 CFR 302.4. Components present in this product at a level which could require reporting under the statute are:

MATERIAL	CAS NUMBER	UPPER BOUND CONCENTRATION
Xylene	01330-20-7	75%

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQ's) and release reporting based on Reportable Quantities (RQ's) in 40 CFR 355 (used for SARA 302, 304, 311, and 312). Components present in this product at a level which could require reporting under the statute are: **** NONE ****

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This information must be included in all MSDS's that are copied and distributed for this material. Components present in this product at a level which could require reporting under this statute are:

MATERIAL	CAS NUMBER	UPPER BOUND CONCENTRATION
Xylene	01330-20-7	75%

TSCA INVENTORY STATUS
The ingredients of this product are listed on, or are exempt from listing on, the TSCA inventory.

STATE-RIGHT-TO-KNOW

CALIFORNIA Proposition 65
This product contains no levels of listed substances, which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute.

MASSACHUSETTS 105 CMR 670.000 Right-To-Know, Substance List (MSL)
Hazardous Substances and Extraordinarily Hazardous Substances on the MSL must be identified when present in products. Components present in this product at a level which could require reporting under the statute are:

MATERIAL	CAS NUMBER	UPPER BOUND CONCENTRATION
Xylene	01330-20-7	75%

PENNSYLVANIA Right-To-Know, Hazardous Substance List
Hazardous Substances and Special Hazardous Substances on the List must be identified when present in products. Components present in this product at a level which could require reporting under the statute are:

MATERIAL	CAS NUMBER	UPPER BOUND CONCENTRATION
Xylene	01330-20-7	75%
Silica, amorphous	68909-20-6	5%

CALIFORNIA SCAQMD RULE 443.1 VOC's:
Volatile Organic Components (VOC's) = Substances with vapor pressure of ≥ 0.5 mm Hg at 104°C (219.2°F).
This product contains 700 g/liter VOC's.

OTHER REGULATORY INFORMATION:
EPA Hazard Categories: Immediate Health Hazard
Delayed Health Hazard
Fire Hazard

TRANSPORTATION INFORMATION:
Proper Shipping Name: Xylenes Solution (75% Xylene)
Hazard Class: 3
Hazard Label : Flammable Liquid
UN Packing Group: III
U.N. Number: UN1307

NOTE: We believe that the information contained herein is current as of the date of this Material Safety Data Sheet, and is offered in good faith. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of NuSil Technology, it is the user's obligation to determine the conditions of safe use of the product.
-NuSil Technology Regulatory Compliance Department

Date: 10/20/97