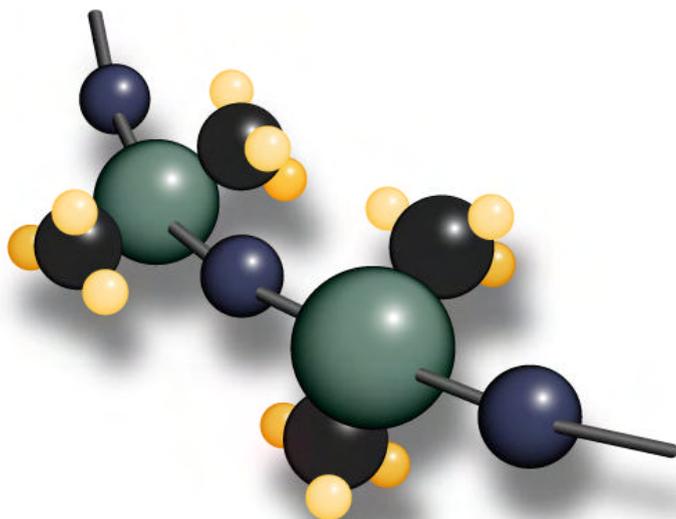


Polymer Systems Technology Limited

UK & Ireland Distributor



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MATERIAL SAFETY DATA SHEET

EPM-2463 PART B

NuSil Technology LLC 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.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

NuSil Technology LLC 1050 Cindy Lane Carpinteria, California 93013 USA (805) 684-8780	EMERGENCY TELEPHONE NUMBERS: (800) 424-9300 CHEMTREC (805) 684-8780 OUTSIDE OF THE USA (703) 527-3887 CHEMTREC
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PRODUCT NAME: EPM-2463 PART B
CHEMICAL NAME: Curing Agent
CHEMICAL FAMILY: Silicone
FORMULA: N/A
MOLECULAR WEIGHT: N/A
SYNONYMS: N/A
CAS # : Mixture

2. HAZARDOUS INGREDIENTS

%	<u>MATERIAL</u>	<u>CAS #</u>	<u>EXPOSURE VALUE</u>	<u>CLASSIFICATION</u>
50	Dibutyltin dilaurate	0077-58-7	See Section 8	See Section 7
50	Tetra-n-propyl silicate**	00682-01-9	See Section 8	See Section 7
**	n-propanol may be generated upon exposure to water or moist air	00071-23-8	See Section 8	See Section 7

3. HAZARDS IDENTIFICATION

EFFECTS OF SINGLE OVEREXPOSURE:

SWALLOWING:

Moderately toxic. Causes severe irritation of the mouth and throat, with chest and abdominal discomfort, nausea, vomiting, diarrhea, faintness, dizziness, weakness, and possibly loss of consciousness. 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 irritation of the respiratory tract, experienced as nasal discomfort and discharge with chest pain and coughing. There may be difficulty in breathing.

SKIN CONTACT:

Causes marked local irritation, seen as severe local redness and swelling. Skin corrosion may occur.

EYE CONTACT:

Causes severe irritation, experienced as discomfort or pain, excess blinking and tear production, with marked excess redness and swelling of the conjunctiva. Iritis may occur. Corneal injury may be severe, extensive, and, if not treated promptly, could result in permanent impairment of vision.

EFFECTS OF REPEATED OVEREXPOSURE:

Repeated exposure to sufficiently high concentrations of dibutyltin may cause liver damage, anemia, and possibly impairment of immunological mechanisms.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:

Because of its irritating nature, this material may aggravate an existing dermatitis.

SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH HAZARD EVALUATION:

None currently known.

OTHER EFFECTS OF OVEREXPOSURE:

None currently known.

4. FIRST AID MEASURES

EMERGENCY AND FIRST AID MEASURES:

SWALLOWING:

If patient is fully conscious, give two glasses of water or milk at once. Do not induce vomiting. Obtain medical attention without delay.

SKIN:

Remove contaminated clothing and wash with soap and water.

INHALATION:

Remove to fresh air. Obtain medical attention if symptoms persist.

EYES:

Immediately flush eyes with water for at least 15 minutes. Obtain medical attention if discomfort persists.

NOTES TO PHYSICIAN:

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. NOTE: Do not induce vomiting. Emesis of this material may prove difficult due to its high viscosity. Aspiration may cause lung damage.

5. FIRE FIGHTING MEASURES

FLASH POINT (test method(s)): 235°C (Pensky-Martin)

FLAMMABLE LIMITS IN AIR (by volume):

LOWER: N/A UPPER: N/A

EXTINGUISHING MEDIA:

Apply alcohol-type or universal-type foams by manufacturers' recommended techniques for large fires. Use carbon dioxide or dry chemical media for small fires.

SPECIAL FIRE FIGHTING PROCEDURES:

Do not aim extinguisher stream 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:

Do not extinguish fires with water. Contact with water may cause release of H₂ gas and n-Propanol which are highly flammable.

This product contains polydimethylsiloxane which can generate formaldehyde as a byproduct of oxidative thermal decomposition at temperatures greater than 150°C (300°F). See Section 10 for further information.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal.

WASTE DISPOSAL METHOD:

Dispose of in accordance with all Federal, State and local regulations.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Normal precautions common to safe manufacturing practice should be followed in handling and storage.

Keep container closed, in a cool dry place.	S3/S7/S8
Avoid contact with skin and eyes	S24/S25
In case of fire, do not breathe fumes	S41

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE VALUES AND SOURCE:

Dibutyltin dilaurate : 0.1 mg/m³ - 8 hours TWA (skin) (as Sn)(ACGIH, OSHA)

Tetra-n-propyl silicate: observe values for n-Propyl Alcohol, formed on exposure to water or humid air:
200 ppm - 8 hours TWA (skin)(ACGIH, OSHA, NIOSH)
250 ppm - STEL / CEIL (skin)(ACGIH, OSHA, NIOSH)

RESPIRATORY PROTECTION:

Use NIOSH approved respirator or self-contained breathing apparatus as needed to maintain personnel exposure below established Occupational Exposure Values.

VENTILATION:

General (mechanical) room ventilation with local ventilation as needed to maintain exposure below established Occupational Exposure Value.

PROTECTIVE GLOVES: PVC-coated.

EYE PROTECTION: Safety goggles.

OTHER PROTECTIVE EQUIPMENT: Eye bath and safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES (based on typical material)

BOILING POINT: N/A
 SPECIFIC GRAVITY (H₂O=1): 1.05
 FREEZING POINT: N/A
 VAPOR PRESSURE : 1.5 mm @ 160°C
 VAPOR DENSITY (air=1): 21.8
 EVAPORATION RATE (Butyl Acetate=1): <1
 SOLUBILITY IN WATER (By wt): Insoluble
 APPEARANCE: Translucent yellow
 ODOR: Slight Odor
 PHYSICAL STATE : Liquid
 PERCENT VOLATILES (by wt): See Section 15

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

10. STABILITY AND REACTIVITY DATA

STABILITY: Stable.

CONDITIONS TO AVOID: Avoid contact with elevated temperatures or open flame.

INCOMPATIBILITY: Oxidizing materials can cause a reaction.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:

Burning can produce carbon monoxide, carbon dioxide, oxides of silicon, and hydrocarbons. 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.

Traces of formaldehyde may be generated due to oxidative thermal decomposition at temperatures greater than 150°C (300°F). Exposure to formaldehyde can cause adverse effects such as skin and respiratory sensitization and eye and throat irritation. Formaldehyde is a potential carcinogen. Evaluate and control exposure to formaldehyde when warranted by conditions of use.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

COMPONENT:

EPM-2463 PART B:

Acute Oral LD ₅₀ (mg/kg):	500-5000 (Rat) Inferred from ingredient hazard(s)
Acute Dermal LD ₅₀ (mg/kg):	1000-2000 (Rbt.) Inferred from ingredient hazard(s)
Acute Inhalation LC ₅₀ (mg/l):	2-20 (Rat) Inferred from ingredient hazard(s)
Other:	N/A.
Ames Test:	N/A.

Refer to Section 3 for further discussion of the health hazards associated with this preparation.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:	Complete information not yet available.
CHEMICAL FATE INFORMATION:	Complete information not yet available.

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:

<u>MATERIAL</u>	<u>CAS NUMBER</u>	<u>UPPER BOUND CONCENTRATION</u>
*n-Propyl Alcohol	00071-23-8	Trace Amount

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:

<u>MATERIAL</u>	<u>CAS NUMBER</u>	<u>UPPER BOUND CONCENTRATION</u>
*n-Propyl Alcohol	00071-23-8	Trace Amount

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 < 1 % by weight VOC's.

OTHER REGULATORY INFORMATION:

EPA Hazard Categories: Immediate Health Hazard
Delayed Health Hazard

COMMENTS:

This product is an oil in the context of the U.S. Clean Water Act. Spills to U.S. surface waters, or to watercourse or sewer leading to U.S. surface waters, that cause a visible sheen must be reported to the National Response Center.

C.H.I.P. Regulations:

Designation:	EPM-2463 PART B
Symbol:	N/A
Indication of Danger:	N/A
Safety Phrases:	S3/S7/S8/S24/S25/S41
(Ref. Sect. 7)	

16. OTHER INFORMATION

HMIS FORMAT:

Health: 2

Flammability: 1

Reactivity: 0

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 LLC Regulatory Compliance Department

Effective Date: January 1, 2009