Dimethicone 500

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / March 26, 2012 / Rules and Regulation

Revision Date: 09-24-2015
Supersedes: 11-14-2012

1 PRODUCT & COMPANY IDENTIFICATION

Product Name: Dimethicone 500
Synonyms: Polydimethylsiloxane
INCI Name: Dimethicone
CAS Number: 63148-62-9
Formula: $C_6H_{18}OSi_2$
Product Form: Liquid
Product Use: Cosmetic use

Distributor: MakingCosmetics.com Inc.
Address: 10800 231st Way NE
Redmond, WA 98053 (USA)
Phone / Fax: 425-292-9502 / 425-292-9601
Web: **www.makingcosmetics.com**

Emergency Telephone Number: 1-800-424-9300 (Chemtrec)

2 HAZARDS IDENTIFICATION

GHS Classification: Flammable Liq. 3
GHS Signal Word: **WARNING**
GHS Hazard Pictograms:

GHS Hazard Statements: H226: Flammable liquid and vapor
GHS Precautionary Statements: P271: Use only outdoors on in well-ventilated area
P210: Keep away from heat/sparks/open flames/hot surfaces - No smoking
P243: Take precautionary measures against static discharge
P102: Keep out of reach of children
P273: Avoid release to the environment
Potential Health Hazards: Eyes: May be irritant.
Inhalation: Not expected to be irritant.
Skin: Not expected to be irritant.
Ingestion: May be irritant.

NFPA Ratings (704):

Health	1	Slight
Flammability	1	Slight
Reactivity	0	Minimal
Specific Hazard	n/a	

3 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Weight %	Molecular Weight
Dimethicone	63148-62-9	100%	162.38 g/mol

4 FIRST AID MEASURES

Eyes: In case of eye contact, rinse with plenty of water for at least 15 minutes and seek medical attention if necessary.
Inhalation: Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary.
Skin: Flush with plenty of water and wash using soap.
Ingestion: Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. Get medical attention if necessary.

5 FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: May be combustible at high temperature. Use appropriate media (foam, carbon dioxide, dry chemical, water spray) for adjacent fire. Do not use water.
Special protective equipment & precautions for firefighters: Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Flash Points: Closed cup: >120°C (248°F)
Specific hazards arising from the May emit toxic fumes under fire conditions. See also Stability and Reactivity section.

chemical:

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment & emergency procedures:	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions:	Not available
Methods and material for containment and cleaning up:	Sweep up and place in suitable, closed containers for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

7 HANDLING & STORAGE

Precautions for safe handling:	When heated to temperatures above 150°C in the presence of air, product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer, and an irritant to the eyes, nose, throat, skin and digestive system. Keep vapor concentrations within the OSHA permissible exposure limit for Formaldehyde. See section 8 for recommendations on the use of personal protective equipment. Keep container closed when not in use.
Conditions for safe storage, incl. any incompatibilities:	Store in cool, dry well ventilated area. Keep away from heat and incompatible materials (see section 10 for incompatibilities).

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	Exposure Limits	Basis	Entity
Dimethicone	None needed		

TWA: Time Weighted Average over 8 hours of work.
TLV: Threshold Limit Value over 8 hours of work.
REL: Recommended Exposure Limit
PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.
IDLH: Immediately Dangerous to Life or Health
WEEL: Workplace Environmental Exposure Levels
CEIL: Ceiling

Personal Protection:

Eyes:	Not required, but wear chemical safety glasses or goggles.
Inhalation:	Not needed under normal conditions of use.
Body:	Suitable gloves. Slip proof shoes may be worn where spills may occur.
Other:	Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

When heated to temperatures above 150°C (302°F) in the presence of air, product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer, and an irritant to the eyes, nose, throat, skin and digestive system. Keep vapor concentrations within the OSHA permissible exposure limit for Formaldehyde.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions. For further information regarding aerosol inhalation toxicity, please refer to the guidance document regarding the use of silicone.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance, Physical State:	Liquid	**Viscosity:**	492 cSt
Odor:	Characteristic	**Vapor Density:**	Not determined
Taste:	Not available	**Evaporation Rate:**	Not available
Color:	Colorless	**Flammability:**	May be combustible
Molecular Weight:	162.38 g/mol	**Upper/lower Explosive Limit:**	Not determined
pH (1% sol. in water)	Not determined	**Flash Point:**	>120°C (248°F)
Boiling Point:	>65°C (149°F)	**Specific Gravity @ 25°C:**	0.97
Melting Point:	Not determined	**Solubility:**	Not determined

10 STABILITY AND REACTIVITY

Reactivity:	Product is stable
Chemical Stability:	Product is stable
Hazardous Polymerization:	Will not occur
Conditions to Avoid:	High heat
Incompatible Materials:	Oxidizing material can cause a reaction
Hazardous Decomposition Products:	Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: carbon oxides and traces of incompletely burned carbon compounds, silicone, and formaldehyde.

11 TOXICOLOGICAL INFORMATION

Acute Oral Toxicity:	LD50 (rat): >15,400 mg/kg
Skin:	No significant irritation expected from single short-term exposure
Eyes:	Direct contact may cause temporary redness and discomfort
Respiratory:	No significant effects expected from a single short-term exposure
Ingestion:	Low ingestion hazard in normal use
Carcinogenicity:	Not available
Teratogenicity:	Not available
Germ Cell Mutagenicity:	Not available
Embryotoxicity:	Not available
Specific Target Organ Toxicity:	Not available
Reproductive Toxicity:	Not available
Respiratory/Skin Sensitization:	Not available

12 ECOLOGICAL INFORMATION

Toxicity to Water Organisms:	Based on analogy to similar materials this product is expected to exhibit low toxicity to aquatic organisms.
Toxicity to Soil Organisms:	Experiments show that when sewage sludge containing polydimethylsiloxane is added to soil, it has no effect on soil microorganisms, earthworms, or subsequent crops grown in soil.
Persistence and Degradability:	Degrades in soil abiotically to form smaller molecules. These in turn are either biodegraded in soil or volatilized into the air where they are broken down in the presence of sunlight. Under appropriate conditions, the ultimate degradation products are inorganic silica, carbon dioxide and water vapor. Due to the very low water solubility of this product, standard OECD protocols for ready and inherent biodegradability are not suitable for measuring the biodegradability of this product. The product is removed >80% during the sewage treatment process.
Bioaccumulative Potential:	This product is a liquid and is a high molecular weight polyer. Due to its physical size it is unable to pass through or be absorbed by biological membranes. This has been confirmed by testing or analogy with similar products.
Mobility in Soil:	If discharged to surface water, this product will bind to sediment. If discharged in effluent to a waste water treatment plant, the product is removed from the aqueous phase by binding to sewage sludge. If the sewage sludge is subsequently spread on soil, the silicone product is expected to degrade.
PBT and vPvB Assessment:	Not available
Other Adverse Effects:	This product or similar has been shown to be non-toxic to sewage sludge bacteria.

13 DISPOSAL CONSIDERATIONS

Waste Residues:	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.
Product Containers:	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information in section 13 is for the product as shipped. Use and/or alterations to the product may change the characteristics of the material and alter the waste classification and proper disposal methods

14 TRANSPORT INFORMATION

DOT (Dept. of Transportation, USA):	Not regulated
TDG (Transportation of Dangerous Goods, Canada):	Not regulated
IMDG (International Maritime Dangerous Goods):	Not regulated
IATA (International Air Transport Association):	Not regulated

ICAO (International Civil Aviation Organization): Not regulated

15 REGULATORY INFORMATION

TSCA Inventory Status:	Included or exempted from listing
DSCL (EEC):	No data available
WHMIS (Canada):	No data available
SARA 302 [40CFR355]:	Non hazardous
SARA 304 [40CFR302]:	Non hazardous
SARA 311/312 [40CFR372]:	None present or none present in regulated quantities.
California Prop 65:	No components contain chemicals known to cause cancer, birth defects, or reproductive harm.
New Jersey Right-to-Know:	Polydimethylsiloxane >60%
Pennsylvania Right-to-Know:	Polydimethylsiloxane >60%

16 OTHER INFORMATION

Revision Date:	09-24-2015
Compliance:	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200
Disclaimer:	This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitableness & completeness of such information for his own particular use.