

Material Safety Data Sheet Dimethyl Silicone Elastomer Dispersion in Xylene

I. PRODUCT IDENTIFICATION

A. Manufactured by:

APPLIED SILICONE CORPORATION

270 Quail Court

Santa Paula, CA 93060

Telephone: (805) 525-5657

Fax: (805) 933-1675

Emergency Phone Numbers: FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CONTACT: CHEMTREC

United States: (800) 424-9300.

International collect calls: 703-527-3887

Trade Name: Dimethyl Silicone Elastomer Dispersion

Chemical Name and Synonyms: Silicone and Xylene mixture

Chemical Formula: Xylene: C₆H₄(CH₃)₂; Silicone: N/A (a silica reinforced polymer)

Chemical Family: Xylene: Aromatic Solvent; Silicone: Reinforced Organopolysiloxane

DOT (CFR 49) Hazard Classification: Flammable Liquid

DOT (CFR 49) Proper Shipping Name: Coating Solution

DOT (CFR 49) Identification Number: NA 1139

II. PRODUCT COMPOSITION

COMPONENT	CAS	REG	NUMBER	OSHA	HAZARD	PERCENTAGE
XYLENE	1330-20-7	Y		52	-	65
ETHYLBENZENE	100-41-4	Y		<		13
SILICONE ELASTOMER*****		N		35		

III. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Physical Appearance: Clear viscous liquid

Odor: Sweet odor

Warning Statements: WARNING! ! ! FLAMMABLE LIQUID. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. CAUSES SKIN, EYE AND RESPIRATORY TRACT IRRITATION. CENTRAL NERVOUS SYSTEM DEPRESSION. CAN ADVERSELY AFFECT THE KIDNEYS, LIVER.

POTENTIAL HEALTH EFFECTS:

Acute Eye: Severe irritant. Can cause redness, tissue destruction, irritation, on prolonged contact. Causes permanent damage to the cornea.

Acute Skin: Harmful if absorbed through skin. Irritant. Can cause redness, dryness, loss of natural oils, irritation, on prolonged contact. Can cause destruction of skin tissue.

Acute Inhalation: Harmful if inhaled. Vapors can cause bright red mucous membranes. At high concentrations may cause headache, drowsiness, loss of coordination, depression, confusion, vomiting, muscle weakness, unconsciousness, coma.

Acute Ingestion: Highly toxic if ingested. May cause central nervous system depression, kidney damage, liver damage, nausea, dizziness, headache, loss of coordination, vomiting, excitement, coma.

Chronic Effects: Prolonged or repeated exposure to high concentrations may cause neural dysfunction.

IV. FIRST AID MEASURES

FIRST AID MEASURES FOR ACCIDENTAL:

Eye Exposure: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention.

Skin exposure: In case of contact, immediately wash with plenty of soap and water for at least 5 minutes. Seek medical attention if irritation develops or persists. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before re-use.

Inhalation: Remove victim from immediate source of exposure and assure that the victim is breathing.

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If breathing is difficult, administer oxygen, if available. If victim is not breathing, administer CPR (cardio-pulmonary resuscitation). Seek medical attention.

Ingestion: If victim is conscious and alert, give 2-3 glasses of water to drink and do not induce vomiting. Seek immediate medical attention. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE: Central nervous system depressants.

NOTES TO PHYSICIAN: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat symptomatically. No specific antidote available.

V. FIRE AND EXPLOSION INFORMATION

Flash Point (TCC): 26°C (79°F). Flammability Class: FLAMMABLE

Method Used: Closed cup.

Flammable Limits in Air, % Volume: Lower: 1.1% and Upper: 7%

Extinguishing Media: Recommended: Dry chemical, foam, carbon dioxide, water fog. Do not use a direct water stream.

Special Fire Fighting Procedures: Fire fighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Cool containers exposed to fire with water.

Unusual Fire and Explosion Hazards: Product will burn under fire conditions. Vapors may travel a considerable distance to a source of ignition and flash back along vapor trail. Closed containers may explode (due to the build up of pressure) when exposed to extreme heat.

Hazardous Decomposition Materials (Under Fire Conditions): Formaldehyde, oxides of carbon, oxides of silicone

VI. ACCIDENTAL RELEASE MEASURES

Evacuation Procedures and Safety: Wear appropriate protective gear for the situation. See Personal Protection information in Section VIII. CAUTION: Spilled material may make the floor slippery. Do not leave traces of product on floors, ladders, etc., as this may present a slipping hazard. Eliminate all sources of ignition until the area is determined to be free from explosion or fire hazards. Evacuate and isolate spill area.

Containment of Spill: Follow procedure described below under Cleanup and Disposal of Spill. Dike spill using absorbent or impervious materials such as earth, sand or clay.

Cleanup and Disposal of Spill: Absorb with an inert absorbent. Scrape up and place in appropriate closed container (see Section 7: Handling and Storage). Absorb with a damp, inert, non-combustible absorbent. Shovel up into an appropriate closed container (see Section VII: Handling and Storage).

Environmental and Regulatory Reporting: Do not flush to drain.

VII. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures: Not available.

Handling: Avoid breathing vapors and mists. Avoid direct or prolonged contact with skin and eyes. Use non-sparking tools and grounded/bonded equipment and containers when transferring. Vent drums while heating.

Drum Container: CONTAINER HAZARDOUS WHEN EMPTY. emptied container retains vapor and product residue. FOLLOW LABEL WARNINGS EVEN AFTER CONTAINER IS EMPTIED. RESIDUAL VAPORS MAY EXPLODE ON IGNITION. DO NOT CUT, DRILL, GRIND OR WELD ON OR NEAR THIS CONTAINER. Improper disposal or reuse of this container may be dangerous and/or illegal. The reuse of this material's container for non-industrial purposes is prohibited and any reuse must be in consideration of the data provided in the MSDS.

Bulk Container: The hazardous nature of tank inspection, cleaning, repairs, etc., requires trained personnel familiar with the hazards involved. Emptied tank retains vapor and product residue, DO NOT CUT OR WELD ON OR NEAR THIS CONTAINER.

Storage: Certain state and local regulations may limit storage quantities, arrangements and locations. These regulations should be considered for storage and handling of this and any other flammable liquid. Store in tightly closed containers. Store in an area that is dry, well-ventilated, away from combustible material, away from ignition sources, away from incompatible materials (see Section X: Stability and Reactivity). Expected shelf life if stored at recommended temperatures: 12 months.

VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

WARNING! ! ! THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

Introductory Remarks: These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each

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intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section XIII: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

This product can form formaldehyde vapors when heated to temperatures above 150°C in the presence of air. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer, and an irritant to the eyes, nose, throat, skin and digestive system. Safe handling conditions may be maintained by keeping vapor concentrations within the OSHA Permissible Exposure Limit for formaldehyde.

Exposure Guidelines: Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting the regulatory requirements. The following limits apply to this material, where, if indicated, S=skin and C=ceiling limit.

XYLENE

	TWA	STEL
ACGIH	100 ppm	150 ppm
OSHA	100 ppm	655 mg/cu m
OSHA	435 mg/cu m	150 ppm

ETHYLBENZENE

	TWA	STEL
ACGIH	100 ppm	125 ppm
OSHA	100 ppm	545 mg/cu m
OSHA	435 mg/cu m	125 ppm

*The xylene solvent used in this product typically consists of 80% by weight mixed xylene isomers, and 20% by weight ethylbenzene.

Engineering Controls: Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: General area dilution/exhaust ventilation.

Respiratory Protection: When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Under normal conditions, in the absence of other airborne contaminants, the following devices should provide protection from this material up to the conditions specified by the appropriate OSHA, WHMIS or ANSI standard(s): Air-purifying (half-mask/full-face) respirator with cartridges/canister approved for use against organic vapors.

Eye/Face Protection: Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

It is generally regarded as good practice to wear a minimum of safety glasses with side shields when working in industrial environments. Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area.

Skin Protection: Skin contact should be minimized through use of gloves and suitable long-sleeved clothing (i.e., shirts and pants). Consideration must be given both to durability as well as permeation resistance.

Work Practice Controls: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: (1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. (2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet. (3) Wash exposed skin promptly to remove accidental splashes or contact with this material.

Women who are pregnant or suspect they are pregnant should not be exposed to or handle this material. Contains substance(s) that is a possible reproductive system hazard based on high dose tests with laboratory animals. Contains a substance that is a probable reproductive system hazard based on human studies. May cause adverse reproductive effects such as birth defects, miscarriages, or infertility.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the phone number in Section I for its exact specifications.

Physical Appearance: Clear viscous liquid.

Odor: Sweet odor

pH: Not applicable

Specific Gravity: 0.87 at 25°C (77°F)

Water Solubility: Insoluble

Melting Point Range: Not available

Boiling Point Range: 138°C to 0°C (280°F to 32°F) at 760 mmHG

Vapor Pressure: 6 to 6.7 mmHG at 20°C (68°F)

Vapor Density: 3.7

Evaporation Rate: 0.86 (Butyl Acetate = 1)

Percent Volatiles by Volume: 15

X. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal handling and storage conditions described in Section VII: Handling and Storage.

Conditions to be Avoided: Combustible materials, heat, open flame, spark, static electricity.

Materials/Chemicals to be Avoided: Strong bases, strong acids, strong oxidizing agents.

The Following Hazardous Decomposition Products Might be Expected: Formaldehyde

Hazardous Polymerization Will NOT Occur.

Avoid the Following to Inhibit Hazardous Polymerization: Not applicable.

XI. TOXICOLOGICAL INFORMATION

Acute Eye Irritation: The following data are for the specified ingredients.

Toxicological Information and Interpretation: Eye - eye irritation, rabbit. Severely irritating. Data for xylene.

Acute Skin Irritation: The following data is for the specified ingredients.

Toxicological Information and Interpretation: Skin - skin irritation, rabbit. Moderately irritating. Data for xylene.

Acute Dermal Toxicity: The following data is for the specified ingredients.

Toxicological Information and Interpretation: LD50 - lethal dose 50% of test species, > 1700 mg/kg, rabbit. Data for xylene.

Acute Respiratory Irritation: No test data found for product.

Acute Inhalation Toxicity: The following data is for the specified ingredients:

Toxicological Information and Interpretation: LD50 - lethal concentration 50% of test species, 5000 ppm/4 hr, rat. Data for xylene.

Acute Oral Toxicity: The following data is for the specified ingredients:

Toxicological Information and Interpretation: LD50 - lethal dose 50% of test species, 4300 mg/kg, rat. Data for xylene.

Chronic Toxicity: This material contains chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5).

Other Data: Laboratory animals exposed by various routes to high doses of xylene showed evidence of effects in the liver, kidneys, lungs, spleen, heart and adrenals. Rats exposed to xylene vapor during pregnancy showed embryo/fetotoxic effects.

XII. ECOLOGICAL INFORMATION

Ecotoxicological Information: No data found for product.

Chemical Fate Information: No data found for product.

XIII. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

Container Handling and Disposal: Any containers equipment used should be decontaminated immediately after use.

EPA Hazardous Waste - YES

EPA RCRA HAZARDOUS WASTE CODES: "I" Igitible. EPA hazardous waste identification number for xylene is F003 and/or D001

XIV. TRANSPORTATION INFORMATION

Transportation Status: IMPORTANT! Statements below provide additional data on listed DOT classification. The listed Transportation Classification does not address regulatory variation due to changes in package size, mode of shipment or other regulatory descriptors.

US Department of Transportation: Hazard Class: 3

Shipping Name: COATING SOLUTION

Technical Shipping Name: (XYLENE)

ID Number UN1139

Packing Group III

Labels FLAMMABLE LIQUID

Emergency Guide # 127

XV. REGULATORY INFORMATION

Inventory Status

Inventory Status

UNITED STATES (TSCA) Y

CANADA (DSL) Y

EUROPE (EINECS/ELINCS) P

AUSTRALIA (AICS) Y

JAPAN (MITI) N

SOUTH KOREA (KECL) Y

Y = All ingredients are on the inventory

E = All ingredients are on the inventory or exempt from listing

P = One or more ingredients fall under the polymer exemption or are on the no longer polymer list. All other ingredients are on the inventory or exempt from listing.

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing.

FEDERAL REGULATIONS

Inventory Issues: All functional components of this product are listed on the TSCA Inventory.

SARA Title III Hazard Classes:

Fire Hazard - YES

Reactive Hazard- NO

Release of Pressure - NO

Acute Health Hazard - YES

Chronic Health Hazard - NO

Sara 313 Chemicals: XYLENE (52 - 65%) ETHYLBENZENE (<13%)

Xylene is subject to the reporting requirements of Section 313 of SARA Title III.

SARA Extremely Hazardous Substances (EHS) CERCLA Hazardous Substances

Ingredient CERCLA/SARA RQ SARA EHS TPQ

XYLENE 100 lbs

ETHYLBENZENE 1000 lbs

STATE REGULATIONS: THIS PRODUCT CONTAINS A CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

XVI. OTHER INFORMATION

National Fire Protection Association Hazards Rating – NFPA(R)

3 Health Hazard Rating – Serious

3 Flammability Rating – Serious

0 Instability Rating – Minimal

National Paint & Coating Hazardous Materials Identification System – HMIS(R)

3 Health Hazard Rating – Serious

3 Flammability Rating – Serious

0 Instability Rating – Minimal

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Reason for Revisions: Change and/or addition made to Section II through XVI.

Key Legend Information:

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

TLV - Threshold Limit Value

PEL - Permissible Exposure Limit

TWA - Time Weighted Average

STEL - Short Term Exposure Limit

NTP - National Toxicology Program

IARC - International Agency for Research on Cancer

ND - Not determined

All information appearing herein is based upon data considered to be accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof.

EFFECTIVE: NOVEMBER 21, 2006

PREPARED BY: A. CORTEZ