

SAFETY DATA SHEET HIGH STRENGTH SILICONE ELASTOMER DISPERSION, RTV, IN XYLENE, IMPLANT GRADE

I. PRODUCT IDENTIFICATION - Part Number 40021

A. Manufactured by:

APPLIED SILICONE CORPORATION
270 Quail Court
Santa Paula, CA 93060, USA
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

PRODUCT STATUS: FDA regulated use only

CHEMICAL NAME OR SYNONYM: POLYORGANOSILOXANES IN XYLENE

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
METHYL TRIACETOXY SILANE	4253-34-3	Y	< 2

III. HAZARDS IDENTIFICATION

A. EMERGENCY OVERVIEW

Physical Appearance and Odor: Clear viscous liquid, xylene 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, AND LIVER. CAUTION! FORMS ACETIC ACID (64-19-7) DURING CURING WHICH MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

B. POTENTIAL HEALTH EFFECTS:

Acute Eye: Severe irritant. Can cause redness, tissue destruction, and irritation, on prolonged contact. Causes permanent damage to the cornea. Acetic acid, emitted during curing, may cause redness, irritation, tissue destruction.

Acute Skin: Harmful if absorbed through skin. Irritant. Can cause redness, dryness, and loss of natural oils, irritation, on prolonged contact. Can cause destruction of skin tissue. Acetic acid, emitted during curing, may be absorbed through the skin. Acetic acid may cause redness, inflammation.

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. Acetic acid emitted during curing may cause respiratory tract irritation.

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

Chronic Effects: This product contains ingredients that are considered to be probable or suspected human carcinogens (see Section 11 – Toxicological Information, Chronic Toxicity)

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 if irritation develops or persists or if visual changes occur.

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

Ingestion: NEVER attempt to induce vomiting. Consult a doctor if necessary.

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 FIGHTING MEASURES

FIRE HAZARD DATA:

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

Method Used: AFNOR T 60103 (EEC closed cup)

Flammability Limits (vol/vol%): Lower: 1 Upper: 7

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

Special Fire Fighting Procedures: Firefighters 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, silica (crystalline)

VI. ACCIDENTAL RELEASE MEASURES

Evacuation Procedures and Safety: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8. **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 damp, inert, non-combustible absorbent. Shovel up into an appropriate closed container (see Section 7: Handling and Storage).

Environmental and Regulatory Reporting: Do not flush to drain.

VII. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures: 5 to 25°C (41 to 77°F)

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 10 – Stability and Reactivity).

VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

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

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

Respiratory Protection: When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations 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 Z81 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. Emergency eyewash 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 to both 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.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical properties here represent typical properties of this product. Contact the Technical Services Department using the phone number in Section 1 for its exact specifications.

Physical Appearance: Clear viscous liquid **Melting Point Range:** Not Available

Odor: Xylene odor

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

pH: Not Applicable

760 mmHg

Specific Gravity: 0.87 at 25°C (77°F)

Water Solubility: Insoluble

Percent Volatiles by Volume: 15

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

Vapor Density: 3.7

Evaporation Rate: 0.86 (Butyl Acetate = 1)

X. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal handling and storage conditions described in Section 7

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:

Decomposition Type: Thermal – Dimethylcyclsiloxanes

Decomposition Type: Oxidative/Thermal – 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 are for the specified ingredients

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: No test data found for product.

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 product contains the substances that are considered to be “probable” or “suspected” human carcinogens as follows:

Ingredient Name	Regulatory Agency Listing Carcinogen			
	OSHA	IARC	NTF	ACGIH
ETHYLBENZENE	NO	Group 2B	NO	NO

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 or equipment used should be de-contaminated immediately after use.

EPA Hazardous Waste: YES

EPA RCA HAZARDOUS WASTE CODES: "I" Ignitable

XIV. TRANSPORTATION INFORMATION

Transportation Status: IMPORTANT! Statements below provide additional data on listed DOT classification:

The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

US Department of Transportation Shipping Name: Hazard Class: 3

Shipping Name: COATING SOLUTION

Technical Shipping Name:

(XYLENE)

ID Number: UN1139

Packing Group: III

Labels: FLAMMABLE LIQUID

XV. REGULATORY INFORMATION

INVENTORY STATUS

Inventory	Status
UNITED STATES (TSCA)	Y
CANADA (DSL)	Y
EUROPE (EINECS / ELINCS)	P
AUSTRIAL (AICS)	Y
JAPAN (MITI)	Y
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	YES

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 the following components that are regulated under California Proposition 65

Ingredient Name	Cancer List	Reprod. List	No. Sign. California
ETHYLBENZENE	Y	N	ND

XVI. OTHER INFORMATION

National Fire Protection Association Hazard Ratings – NFPA(R)

3 Health Hazard Rating – Serious

3 Flammability Rating – Serious

0 Instability Rating – Minimal

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

3 Health Hazard Rating – Serious

3 Flammability Rating – Serious

0 Reactivity Rating – Minimal

Reason for Revision: Release of safety data sheet with updated format.

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

DISCLAIMER

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: August 16, 2013