MATERIAL SAFETY DATA SHEET
FLUOROSILICONE ELASTOMER DISPERSION IN PERCHLOROETHYLENE (PCE) / BUTYL ACEETATE

I. PRODUCT IDENTIFICATION

A. Manufactured by:

APPLIED SILICONE CORPORATION
270 QUAIL COURT
SANTA PAULA, CA 93060
Telephone: (805) 525-5657
Fax: (805) 933-1675

For chemical emergency
Please Call CHEMTREC
(800) 424-9300

B. Trade Name: Silicone Elastomer Dispersion
C. Chemical Name and Synonyms: Silicone in Perchlorethylene (PCE) / Butyl Acetate Mixture
D. Chemical Formula: Tetrachloroethylene: C_4HCl_4; Butyl Acetate: $C_6H_{12}O2$; Silicone: polyer
E. Chemical Family: Tetrachloroethylene: Chlorinated Hydrocarbon; Butyl Acetate: ester; Silicone: Organopolysiloxane
F. DOT (CFR 49) Hazard Classification: 6.1
G. DOT (CFR 49) Proper Shipping Name: Toxic Liquid, Organic N.O.S. (Perchloroethylene Mixture)
H. DOT (CFR 49) Identification Number: UN 2810
I. Additional Transportation Information: Marine Pollutant

II. PRODUCT COMPOSITION

A. Silicone elastomer, not hazardous: 18% by weight.
B. Butyl Acetate, a health hazard and a flammable liquid: 4% by weight
C. Perchloroethylene, a health hazard and non-flammable: 78% by weight

III. PHYSICAL PROPERTIES (FOR PERCHLOROETHYLENE)

A. Boiling Point: 249.8^{o}F
B. Specific Gravity (water = 1): 1.6 @ 20^{o}C
C. Vapor Pressure at 20^{o}C: 14.2 mm Hg
D. Vapor Density (Air = 1): 5.83
E. Water Solubility: 0.015% @ 25^{o}C
F. Evaporation Rate (Butyl Acetate = 1): 0.09
G. Appearance and Odor: Perchloroethylene: Clear, colorless liquid, sweet odor; Silicone: odor of inhibitor

IV. FIRE AND EXPLOSION INFORMATION

A. Flash Point, ^{o}F: >212^{o}F
B. Flammable Limits in Air, % Volume: Not Applicable
C. Extinguishing Media: Use water fog, dry chemical, foam, or CO_2. Do not use a direct water stream.
D. Special Fire Fighting Procedures: Fire fighters should wear self-contained breathing apparatus and full protective clothing. Use water spray to cool nearby containers.
E. Unusual Fire and Explosion Hazards: Heating may result in release of toxic fumes.

V. HEALTH HAZARD AND PROTECTION DATA (FOR 1,1,1 TRICHLOROETHANE)

A. Personal Protection Recommended: Use local, mechanical, exhaust ventilation capable of maintaining vapor concentrations at the point of use below the PEL. If exposure may exceed occupational exposure limits use a NIOSH approved respirator to prevent overexposure. Reference 29 CFR 1910.134 for Federal standards concerning respiratory protection. Wear impervious gloves and protective clothing as required to prevent skin contact. Wear protective goggles to prevent eye contact. An eyewash and safety shower should be nearby and ready for use.
B. Signs and Symptoms of Exposure:
   1. Inhalation: Vapors and mist irritate mucous membranes. Inhalation of higher concentrations may cause headaches, nausea, vomiting, and coma. Inhalation of very high concentrations or prolonged exposure may cause unconsciousness or death.
   2. Eye Contact: Liquid, mists, and vapors are irritating to the eyes.
   3. Skin Contact: Brief contact may dry the skin. Prolonged or repeated contact may irritate the skin, causing dermatitis.
   4. Ingestion: Swallowing the liquid may cause vomiting. If vomiting occurs spontaneously, take precautions to prevent vomitus from entering the lungs since even a small quantity in the lungs may result in chemical pneumonitis and pulmonary edema/hemorrhage.
   5. Chronic Effects of Exposure: Prolonged or repeated exposure to high concentrations may cause neural

dysfunction and liver and kidney damage.

C. First Aid for Exposure:
   1. Eye contact: Immediately flush with water for at least 15 minutes while holding eyelids open and lifting upper and lower eyelids occasionally. Get medical attention.
   2. Skin contact: Immediately wash skin with lots of soap and water. Remove contaminated clothing and shoes and wash before reuse. Get medical attention if irritation persists after washing.
   3. Ingestion: Do not induce vomiting. Get immediate medical attention. If spontaneous vomiting occurs, keep victim's head below his hips to prevent breathing the vomitus into lungs.
   4. Inhalation: Remove to fresh air. Give artificial respiration if not breathing. Get immediate medical attention.

D. Occupational Exposure Limits:

	Butyl Acetate*	Perchlorethylene
OSHA PEL/TWA	150 ppm	100 ppm
ACGIH TLV/TWA	100 ppm	25 ppm
ACGIH TLV/STEL	150 ppm	100 ppm

*The butyl acetate solvent used in this product typically consists of 1% by weight of n-butanol

E. Toxicity
   1. Oral: Rat LD50 2629 mg/kg
   2. Dermal: Rabbit LD50 > 10000 mg/kg
   3. Inhalation: Rat LC50 = 34200 mg @ 3/8 hour; Mouse LC50 = 5200 ppm/4 hours
   4. Carcinogenicity: This material is considered to be a carcinogen by the State of California.
   5. Other Data: Laboratory animals exposed by various routes to high doses of tetrachloroethylene showed evidence of effects in the liver, kidneys, lungs, spleen, heart, and adrenals. Rats exposed to tetrachloroethylene vapor during pregnancy showed embryo/fetotoxic effects. Mice exposed orally to doses producing maternal toxicity showed embryo/fetotoxic effects.

F. Medical Conditions Generally aggravated by exposure: Pre-existing eye, skin, kidney, liver, pulmonary, nervous system and respiratory disorders.

VI. SPILL AND LEAK PROCEDURES

Evacuate the hazard area of unprotected personnel. Use personal protection to prevent personal exposure. Extinguish all sources of ignition. Electrically ground all handling equipment. Provide adequate ventilation. As required dike with soil or other non-combustible absorbent materials to prevent spread of spill. Mop or wipe up and place in appropriate containers and/or place absorbent material on spill and transfer absorbed solvent to appropriate containers. Consult and comply with Federal, State, and local regulations concerning any release of hazardous materials into the water, water piping systems, ground, or air. Consult and comply with Federal, State, and local regulations concerning removal of hazardous waste.

VII. REACTIVITY DATA

A. Stability: This material is chemically stable. Hazardous polymerization will not occur.
B. Materials to Avoid: Avoid heat, sparks, open flames, metals, acids, bases and strong oxidizing agents.
C. Hazardous Decomposition Products: Burning may liberate toxic fumes such as oxides of carbon, hydrogen chloride, phosgene, , and halogenated compounds.

VIII. OTHER PRECAUTIONS

Keep away from heat, sparks, and flames. Store in a cool, dry, and well-ventilated place away from incompatible materials. To relieve container pressure, vent frequently, particularly in warm weather. Electrically ground all equipment when handling this product and use only non-sparking tools. Keep container tightly closed when not in use. Do not use pressure to empty container. Wash thoroughly after handling. Do not cut, grind, weld, or drill on or near this container. Vapor of this product are heavier than air and may accumulate in low areas or other poorly ventilated areas. Do not enter places where vapors are suspected unless adequate respiratory protection is worn and an observer is present. Empty containers can contain product residue. All hazard warnings apply to empty containers.

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: FEBRUARY 2, 2006
PREPARED BY: A.CORTEZ