

CSL

safety data

Prepared January 10, 1989

MSDS NO. 60

I PRODUCT IDENTIFICATION

PRODUCT NAME CSL 102, 104, 110, 125, 160 General Purpose Sealant
CHEMICAL NAME Not Applicable
CHEMICAL FORMULA Silicone Sealant
MOLECULAR WEIGHT Polymer

II HAZARDOUS INGREDIENTS OF MATERIAL

MATERIAL	%	CAS Number	ACGIH TLV	LD50
Aerophobe Silica	5-10	7831-89-8	5 ppm	>5000 mg/kg oral/rat
Acetoxy Silane	1-5	13170-23-5	10 ppm	3000 mg/kg oral/rat
Acetoxy Silane	1-5	17589-77-9	10 ppm	3000 mg/kg oral/rat

III PHYSICAL DATA

Boiling Point (°C)	Not Applicable
Freezing Point (°C)	Not Applicable
Vapor Pressure (mmHg)	Negligible @ 25°C
Vapor Density (Air=1)	Not Applicable
% Volatile by Volume	2 - 10
Specific Gravity (Water=1)	1.03 - 1.04
Solubility in Water	Insoluble
Solubility in Other Solvents	Soluble in most organic solvents
Evaporation Rate (Butyl Acetate=1)	Not Applicable
Appearance and Odor	Smooth, thixotropic paste - acetic acid vapor by-product during cure
Odor Threshold	0.2 - 1 ppm

IV FIRE AND EXPLOSION DATA

Flash Point of Curing Byproduct and Method	83 - 84°C. P.M.C.C. ASTM D-83
Lower Explosive Limit %	Not Established
Upper Explosive Limit %	Not Established
Autoignition Temperature	No Data
Fire Extinguishing Agents	Chemical Foam, Dry Chemical, CO ₂
Fire Fighting Procedures	Sealant will burn if strongly heated. Water can be used to cool material below flash point. Sealant may emit noxious or toxic fumes. Self Contained Breathing Apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. Full protective clothing to be worn.
Unusual Fire/Explosion Hazard	None
Hazardous Combustion Products	Carbon dioxide, Carbon monoxide, Silicone dioxide

V HEALTH HAZARD AND TOXICOLOGICAL DATA

A. EFFECTS OF CHRONIC EXPOSURE

Health Effects	Pulmonary Edema, Dermatitis
Toxicological Data	LD50 of mixture (calculated) Ingestion/Rat 3900 mg/kg
Carcinogenicity Data	The ingredients of this product are not listed as carcinogens by National Toxicology Program, and have not been evaluated by the International Agency for Research on Cancer or the American Conference of Governmental Industrial Hygienists.
Reproductive Data	No information available and no adverse reproductive effects are anticipated.
Mutagenicity Data	No information available and no adverse mutagenic effects are anticipated.
Teratogenicity Data	No information available and no adverse teratogenic effects are anticipated.
Synergistic Products	None known.

B. EFFECTS OF ACUTE EXPOSURE

Inhalation	Not normally an inhalation hazard. Acetic acid vapor (by-product of curing reaction) may be irritating. Inhalation of concentrated vapors may cause serious damage to the lining of the nose, throat, and lungs. Bronchopneumonia and pulmonary edema may develop following acute overexposure.
Eyes	Concentrated acetic acid vapors can cause moderate irritation and burns.
Skin	Repeated exposure can cause irritation and thickening of the skin and a dark coloration. Dermatitis may develop following acute overexposure.
Ingestion	Very low oral toxicity. May cause irritation and obstruction to gastro-intestinal tract.

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FIRST AID PROCEDURES

Inhalation	The affected person should be moved to fresh air and made to rest. Obtain medical attention as a precaution. Treat symptomatically.
Eye Contact	Do not attempt to physically remove solids or gums from eye. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes, by the clock, holding the eyelid(s) open. Obtain medical attention immediately.
Skin Contact	Removed contaminated clothing. Wash gently and thoroughly with water and non-abrasive soap. If symptoms persist, obtain medical attention. Contaminated clothing should be laundered before use.
Ingestion	Never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. DO NOT INDUCE VOMITING. Have victim drink 8 to 10 oz. (240 to 300 ml) of water to dilute material in stomach. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Repeat the administration of water. Obtain medical attention immediately.
First Aid	Provide general supportive measures (comfort, warmth, rest). Consult a physician and/or the nearest Poison Control Center for all exposures except minor instances of inhalation or skin contact. Solid or plastic material in eye should be removed only by a physician.

VII REACTIVITY DATA

Product Stability	Stable
Hazardous Polymerization	Will not occur
Incompatible Materials	STRONG OXIDIZERS, CONCENTRATED ACIDS OR BASES - cause degradation of polymer. Boiling water may soften and weaken material.
Hazardous Decomposition Products	Combustion will produce silicon dioxide, carbon dioxide and carbon monoxide

VIII PREVENTATIVE MEASURES

A. PERSONAL PROTECTION EQUIPMENT

Respiratory Protection	Not required unless normal ventilation is inadequate. Use mask with filter for acetic acid vapor if ventilation is inadequate to prevent overexposure by inhalation.
Eye/Face Protection	Chemical splash goggles.
Skin Protection	Gloves, coveralls, apron may be useful to prevent contamination of skin or clothing.
Resistance of Materials for Protective Clothing	No specific data. Most rubbers and plastics are adequate.
Ventilation Requirements	Use of mechanical dilution ventilation to sufficiently maintain the concentration of acetic acid below the recommended occupational exposure limit whenever this material is used in a confined space or is heated above normal temperatures (up to 38 degrees Celsius).

B. STORAGE AND HANDLING

Storage Conditions	Store under cool dry conditions. Keep container tightly sealed when not in use.
Handling Procedure	Acetic acid vapor will be liberated during application and curing. Adequate ventilation is required to maintain below TLV. DO NOT handle or store near an open flame, sources of heat, or sources of ignition. Cured sealant requires no special precautions.

C. ENVIRONMENTAL PROTECTION

Spill and Leak Procedure	Restrict access to area of spill. Provide ventilation and protective clothing if needed. Scrape-up sealant with cardboard/rag and place in container.
Waste Disposal	Review environmental regulations prior to disposal. Silicone wastes can often be incinerated in approved facilities. Solid wastes may be sent to a designated landfill site.

IX ADDITIONAL INFORMATION AND SOURCES USED

- American Conference of Governmental Industrial Hygienists Inc., Documentation of the Threshold Limit Values (TLVs) and Biological Exposure Indices, 5th Edition, 1986, Cincinnati, OH.
- Keith, L.H. et al, eds, Compendium of Safety Data Sheets for Research and Industrial Chemicals, Volume 2, 1985.
- Sax, Irving, et al, Dangerous Properties of Industrial Materials, 1984, New York, NY.
- Canadian Centre for Occupational Health and Safety, CHEMINFO, Record #15E.
- Material Safety Data Sheets from Cabot Corporation: Cab-O-Sil Division, Wacker-Chemie GMBH, ICI Europe Ltd. Specialty Chemicals, Kay-Fries Inc., Shin-Etsu Chemical Co. Ltd., ESSO Chemicals.

X PREPARATION INFORMATION

Date Issued	October 25, 1988
Prepared By	Gregg Bentley
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XI REGULATORY CLASSIFICATION

WHMIS Classification:	1. CLASS B-Flammable and Combustible Material Division 3-Combustible Liquid
	2. CLASS D-Poisonous and Infectious Material Division 2-Other Toxic Effects Subdivision b-Toxic
TCG Information:	Not regulated in Canada

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