



MATERIAL SAFETY DATA

CSL 520 Silicone Potting and Encapsulating Compound

Reviewed March 30, 2010

MSDS NO. 200

I PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME	CSL 520 Silicone Potting and Encapsulating Compound
CHEMICAL NAME	Not Applicable
CHEMICAL FORMULA	Silicone Sealant
MOLECULAR WEIGHT	Polymer
MATERIAL USES	Two-Part Silicones for Potting and Encapsulation.
MANUFACTURER	CSL Silicones Inc. 144 Woodlawn Road West Guelph, ON N1H 1B5 Canada
TELEPHONE	1-519-836-9044
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II HAZARDS IDENTIFICATION

A. HAZARDOUS INGREDIENTS OF MATERIAL

Octamethylcyclotetrasiloxane has shown reproductive effects in laboratory animals at concentrations of 500 and 700 ppm. There is no information of its adverse effects in human.

B. EFFECTS OF CHRONIC EXPOSURE

Health Effects	None
Toxicological Data	LD50 not established.
Carcinogenicity Data	Respirable Crystalline Silica has been classified as a probable carcinogen by the International Agency for Research on Cancer (IARC) and the National Institute for Occupational Health Safety and Health (NIOSH). Neither the base compound, nor the cured sealant releases any respirable quartz.
Reproductive Data	Octamethylcyclotetrasiloxane (in concentration of 500 to 700 ppm) has shown reproductive effects in laboratory animals. No available information of adverse reproductive effects of other ingredients of this product
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

C. EFFECTS OF ACUTE EXPOSURE

Inhalation	Not an inhalation hazard.
Eyes	May cause slight irritation, but no significant effects.
Skin	May cause slight irritation, but no significant effects.
Ingestion	No established oral toxicity. May cause irritation to the gastro-intestinal tract.

D. HAZARD SYMBOLS

Harmful if swallowed

III COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	%	CAS NUMBER	ACGIH TLV	LD50
Zirconium Silicate	40-60	14940-68-2	5 mg/m ³	Not Established
Crystalline Quartz	2-3	14808-60-7	0.025 mg/m ³ (dust)	Not Established
Octamethylcyclo-Tetrasiloxane	0.1-2	556-67-2	10 ppm	2000 mg/kg oral/rat 36 mg/L inhal/ rat 4 hrs

IV FIRST AID MEASURES

Inhalation	The affected person should be removed 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	Remove contaminated clothing. Wash gently and thoroughly with water and non-abrasive soap. If symptoms persist, obtain medical attention. Contaminated clothing should be laundered before re-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 300ml) of water or milk to dilute material in stomach. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Repeat the administration of water/milk. 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 the eye should be removed only by a physician.

V FIRE FIGHTING MEASURES**A. FIRE AND EXPLOSION DATA**

Flash Point of Curing	
By-Product and Method	Not Applicable
Lower Explosive Limit %	Not Applicable
Upper Explosive Limit %	Not Applicable
Autoignition Temperature	No Data
Fire Extinguishing Agents	Dry Chemical, CO ₂ , Water Spray
Unusual Fire/ Explosion Hazard	None
Hazardous Combustion Products	Carbon Dioxide, Carbon Monoxide, Silicon Dioxide, Formaldehyde

B. FIRE FIGHTING PROCEDURES

Wear a Self Contained Breathing Apparatus (SCBA) which provides eye protection and is NIOSH approved. Sealant will burn if strongly heated. Water can be used to cool material below flash point.

VI ACCIDENTAL RELEASE MEASURES

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

VII HANDLING AND STORAGE

Storage Conditions	Store in cool dry conditions. Keep container tightly sealed when not in use.
Handling Procedure	DO NOT handle or store near open flame, sources of heat or sources of ignition. Cured CSL product does not require special precautions.

VIII EXPOSURE CONTROL AND PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection	Not required unless normal ventilation is inadequate.
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	Not required.

IX PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Smooth, viscous liquid
Odour	Almost odourless
Odour Threshold	Not Applicable
pH	Not determined
Boiling Point (°C)	Not Applicable
Freezing Point (°C)	Not Applicable
Vapor Pressure (mm Hg)	Negligible @ 25°C.
Vapor Density (Air = 1)	Not Applicable
VOC Concentration	Not Applicable
Specific Gravity (Water = 1)	1.60
Solubility in Water	Insoluble
Solubility in Other Solvents	Soluble in Most Organic Solvents
Evaporation Rate	Not Applicable
Decomposition Temperature	Not determined

X STABILITY AND REACTIVITY

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, carbon monoxide and nitrogen oxides. A component of this product can generate formaldehyde at approximately 150°C (300°F) and above in the atmosphere containing oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant and potential carcinogen.

XI TOXICOLOGICAL INFORMATION

Toxicological Data

LD50 Not established.

Evidence of reproductive effects of Octamethylcyclotetrasiloxane in laboratory animals at concentrations of 500 and 700 ppm

XII ECOLOGICAL INFORMATION

None

XIII DISPOSAL CONSIDERATION

Not classified as Hazardous Waste.

Review environmental regulations for disposal. Silicone wastes can often be incinerated in approved facilities. Solid waste may be sent to a designated landfill site.

XIV TRANSPORT INFORMATION

TDG Information

Not a regulated item.

XV REGULATORY INFORMATION

Risk Phrases

R22 Harmful if swallowed.

WHMIS Classification

Non-controlled product

RoHS Statement

CSL 520 Silicone Potting and Encapsulating Compound does not contain Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent Chromium, Polybrominated Biphenyls (PBBs) and Polybrominated Diphenyl Ethers (PBDEs) as listed in RoHS Directives.

TSCA Status

All ingredients of this product are listed on TSCA Inventory of Chemicals.

State of California Safe Drinking Water And Toxic Enforcement Act 1986 (Proposition 65)

None of the ingredients of this product is listed on Proposition 65 list issued on December 2006.

Canadian DSL Status

All ingredients of this product are on the Canadian DSL.

XVI OTHER INFORMATION

Date Issued

August 9, 2007

Date Revised

March 30, 2010

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REFERENCES

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2. National Institute for Occupational Safety and Health, Registry of Toxic Effects of Chemical Substances.
3. Sigma-Aldrich Corp., USA, The Sigma-Aldrich Library of Chemical Safety Data, 1985.
4. Sittig, M., handbook of Toxic and Hazardous Chemicals and Carcinogens, 2nd Edition, 1985, Park Ridge, NJ.
5. Canadian Center for Occupational Health and Safety, CHEMINFO, Record #15E, #26E.
6. Material Safety Data Sheets from Cabot Corporation, Wacker-Chemie GMBH, General Filtration, Dow Corning, Union Carbide, Hoechst Canada, Honeywell Chemicals.
7. Canada's National Occupational Health & Safety Resources at www.ccohs.ca/oshanswers/legisl/whmis
8. Information from Health Canada Website at www.hc-sc.gc.ca/ahc-asc/intactiv/ghs-sgh/index_e.html
9. Information from United Nations Website at www.unece.org/trans/danger/publi/ghs/ghs_rev01/01files_e.html
10. Information about RoHS (Restriction of Use of Certain Hazardous Substances in Electrical and Electronic Equipments) was obtained from Website at www.rohs.gov.uk
11. Information about State of California Safe Drinking Water and Toxic Enforcement Act 1986 (Proposition 65) was obtained from Website at www.oehha.ca.gov/prop65.html

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