



# MATERIAL SAFETY DATA

## CSL 944 Primer

Reviewed April 7, 2010

MSDS NO. 350

### I PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME	CSL 944 Primer
CHEMICAL NAME	Not Applicable
CHEMICAL FORMULA	Mixture
MOLECULAR WEIGHT	Not Applicable

MATERIAL USES	Primer to promote adhesion to substrates.
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MANUFACTURER	CSL Silicones Inc. 144 Woodlawn Road West Guelph, ON N1H 1B5 Canada
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### II HAZARDS IDENTIFICATION

#### A. HAZARDOUS INGREDIENTS OF MATERIAL

Xylene and Petroleum Ethers are released in the air during drying of the primer. Both chemicals are flammable. Remove any source of ignition.

#### B. EFFECTS OF CHRONIC EXPOSURE

Health Effects	Unknown
Toxicological Data	LC50 of mixture (calculated) 6000 ppm for 4 hours by inhalation in rat.
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 Government 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

#### C. EFFECTS OF ACUTE EXPOSURE

Inhalation	May cause irritation of nose, throat and respiratory tract, and central nervous system (CNS) depression see OTHER HEALTH EFFECTS).
Eyes	Vapour is an irritant, and may cause corneal damage and photophobia (light sensitivity). Liquid can cause severe irritation, reddening, swelling and corneal burns.

<b>Skin</b>	Direct contact with vapor or liquid may cause defatting, dry and cracking of the skin. Xylene is absorbed slowly through the skin. Prolonged and repeated contact may cause dermatitis.
<b>Ingestion</b>	May cause irritation and burning of the mouth, throat and CNS Depression(see OTHER HEALTH EFFECTS). Possibility of severe lung damage if mixture is aspirated.
<b>Other health Effects</b>	CNS depression is characterized by headache, dizziness, drowsiness, nausea, vomiting and incoordination. Severe overexposures may lead to coma and possibly death due to respiratory failure. Intentional misuse of organic solvents (e.g. "glue sniffing") over prolonged periods of time may be habit forming and lead to behavioral changes. Xylene may sensitize heart muscle causing cardiac arrhythmia, in rare cases.

#### D. HAZARD SYMBOLS



Flammable Liquid and vapours



Harmful if swallowed

### III COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	%	CAS NUMBER	ACGIH TLV	LD50
Xylene	60-80	1330-20-7	100 ppm	4300 mg/kg oral/rat >1700 mg/kg skin/rabbit
Petroleum Ether	5-10	8032-32-4	300 ppm	3400 ppm inhal/rat 4 h
Petroleum Naphtha	1-5	64742-89-8	400 ppm	>5000 mg/kg oral/rat >3000 mg/kg skin/rabbit

### IV FIRST AID MEASURES

<b>Inhalation</b>	The affected person should be moved to fresh air and made to rest. Obtain medical attention as a precaution. Treat symptomatically.
<b>Eye Contact</b>	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.
<b>Skin Contact</b>	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.
<b>Ingestion</b>	Never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. <b>DO NOT INDUCE VOMITING.</b> Have victim drink 8 to 10 oz. (240 to 300ml) 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.
<b>First Aid</b>	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.

## V FIRE FIGHTING MEASURES

### A. FIRE AND EXPLOSION DATA

Flash Point	12-20 °C. P.M.C.C. ASTM D-93
Lower Explosive Limit %	1.0
Upper Explosive Limit %	7.0
Auto-ignition Temperature	Not determined
Fire Extinguishing Agents	Water Spray, CO <sub>2</sub> , Dry Chemical, Chemical Foam
Hazardous Combustion Products	Carbon Dioxide and Carbon Monoxide

### B. FIRE FIGHTING PROCEDURES

Shut off fuel supply to fire if possible. Water is generally not suitable. Water mist/foam can be used to reduce the rate of burning and for cooling containers. Do not use direct stream of water, this may spread the fire. Wear a Self Containing Breathing Apparatus (SCBA) which provides eye protection and which is NIOSH approved. NOTE: Vapor is heavier than air and can collect in tanks and along the floor.

## VI ACCIDENTAL RELEASE MEASURES

Spill and Leak Procedure	Eliminate sources of ignition. Stop or reduce discharge if safe to do so. Prevent from entering water courses or sewers. Ventilate enclosed spaces. Contain by applying absorbent.
Waste Disposal	Collect waste absorbent and contaminated soil for disposal. Review environmental regulations to disposal. For significant releases, contact appropriate regulatory authorities

## VII HANDLING AND STORAGE

Storage Conditions	Store in tightly closed, grounded containers in a cool area separate from work areas. Storage area should have independent ventilation and no sources of heat, flame or spark.
Handling Procedure	Use minimal quantities in designated areas with adequate ventilation and away from any source of heat or sparks. When not in use, containers should be covered and stored in fire resistant cabinet. Metal containers should be grounded when liquid is being transferred. NOTE: Do not siphon or pipette by mouth.

## VIII EXPOSURE CONTROL AND PERSONAL PROTECTION

### AIRBORNE EXPOSURE LIMIT

Component	OSHA PEL	ACGIH TLV	Other Limits
Xylene	100 ppm (TWA)	100 ppm (TWA)	150 ppm (STEL)
Petroleum Ether	300 ppm (TWA)	300 ppm (TWA)	400 ppm (STEL)

### PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection	NIOSH/MSHA approved air-purifying respirator, equipped with organic vapor/dust cartridge.
Eye/Face Protection	Chemical splash goggles or a full face shield where splashing is possible.
Skin Protection	Gloves, coveralls, apron may be useful to prevent contamination of skin or clothing.

**Resistance of Materials for Protective Clothing**      **Good - Nitrile rubber (NBR), acrylonitrile rubber, Viton, and polyvinyl alcohol NOT RECOMMENDED - Neoprene rubber, natural rubber and polyvinyl chloride (PVC)**

**Ventilation Requirements**      **Local exhausts to provide sufficient removal of vapours.**

## **IX      PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State</b>	<b>Amber Liquid</b>
<b>Odour</b>	<b>Aromatic odour</b>
<b>Odour Threshold</b>	<b>0.2 to 2.0 ppm</b>
<b>pH</b>	<b>Not determined</b>
<b>Boiling Point ( °C)</b>	<b>&gt;140°C</b>
<b>Freezing Point ( °C)</b>	<b>Unknown</b>
<b>Vapor Pressure (mm Hg)</b>	<b>5 @ 20°C.</b>
<b>Vapor Density (Air = 1)</b>	<b>3.7</b>
<b>VHAP (per pound)</b>	<b>0.77</b>
<b>VOC Concentration</b>	<b>714 g/L (5.96 lb/gallon)</b>
<b>Specific Gravity (Water = 1)</b>	<b>0.87</b>
<b>Solubility in Water</b>	<b>Negligible</b>
<b>Solubility in Other Solvents</b>	<b>Soluble in Most Organic Solvents</b>
<b>Evaporation Rate (Butyl Acetate = 1)</b>	<b>0.6</b>
<b>Decomposition Temperature</b>	<b>Not determined</b>

## **X      STABILITY AND REACTIVITY**

<b>Product Stability</b>	<b>Stable</b>
<b>Hazardous Polymerization</b>	<b>Will not occur</b>
<b>Incompatible Materials</b>	<b>STRONG OXIDIZERS</b>
<b>Conditions to Avoid</b>	<b>High temperatures, sparks, open flames and all other sources of ignition</b>
<b>Hazardous Decomposition Products</b>	<b>Combustion will produce carbon dioxide and carbon monoxide.</b>

## **XI      TOXICOLOGICAL INFORMATION**

**Toxicological Data**      **LC50 of mixture (calculated) 6000 ppm for 4 hours by inhalation in rat.**

**No other known applicable information**

## **XII      ECOLOGICAL INFORMATION**

Xylene is the major ingredient of this product. When released into the soil or water this material may evaporate to a moderate extent. When released into the soil, this material is expected to leach into the ground water. In soil or water this material is expected to biodegrade to moderate extent. When evaporated into the air this material may degrade in a photochemical reaction producing hydroxyl radicals. Half life into the air is less than one day. This material is not expected to bioaccumulate.

The LC50 value for fish is between 10 and 100 mg/L/96 hours. This material is slightly toxic to aquatic life.

## **XIII      DISPOSAL CONSIDERATION**

**Review environmental regulations for disposal.**

## XIV TRANSPORT INFORMATION

Hazard Class 3.2  
Packing Group II  
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## XV REGULATORY INFORMATION

**Risk Phrases**  
R10 Flammable  
R20 Harmful by inhalation.  
R21 Harmful in contact with skin.  
R22 Harmful if swallowed.  
R36 Irritating to eyes.  
R37 Irritating to respiratory system.  
R38 Irritating to skin.  
R65 Harmful: may cause lung damage if swallowed.

**Safety Phrases**  
S15/16 Keep away from heat and source of ignition  
S23 Do not breath vapours  
S24/25 Avoid contact with skin and eyes  
S51 Use in well-ventilated areas

**WHMIS Classification**  
1. CLASS B-Flammable and Combustible Material  
Division 2-Flammable Liquid  
2. CLASS D-Poisonous and Infectious Material  
Division 2-Other Toxic Effects  
Subdivision A- Very toxic material  
2. CLASS D-Poisonous and Infectious Material  
Division 2-Other Toxic Effects  
Subdivision B- Toxic

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

**Canadian DSL Status** All ingredients of this product are on the Canadian DSL.

## XVI OTHER INFORMATION

**Date Issued** August 9, 2007  
**Date Revised** April 7, 2010  
**Prepared By** Farooq Ahmed, Research and Development Manager  
**Emergency Contact** Baz Mistry, Laboratory Manager  
or Farooq Ahmed, Research and Development Manager

## REFERENCES

1. Material Safety Data Sheet of Xylene from J. T. Baker, 222 Red School Lane, Phillipsburg, NJ 08865.
2. American Conference of Governmental Industrial Hygienists Inc., Documentation of the Threshold Limit Values (TLV) and Biological Exposures Indices, 5th Edition, 1986, Cincinnati, OH.
3. National Institute for Occupational Safety and Health, Registry of Toxic Effects of Chemical Substances.
4. Sigma-Aldrich Corp., USA, The Sigma-Aldrich Library of Chemical Safety Data, 1985.
5. Sittig, M., handbook of Toxic and Hazardous Chemicals and Carcinogens, 2nd Edition, 1985, Park Ridge, NJ.
6. Canadian Center for Occupational Health and Safety, CHEMINFO, Record #15E, #26E.

7. Material Safety Data Sheets from Cabot Corporation, Wacker-Chemie GMBH, General Filtration, Dow Corning, Union Carbide, Hoechst Canada, Honeywell Chemicals.
8. Canada's National Occupational Health & Safety Resources at [www.ccohs.ca/oshanswers/legisl/whmis](http://www.ccohs.ca/oshanswers/legisl/whmis)
9. Information from Health Canada Website at [www.hc-sc.gc.ca/ahc-asc/intactiv/ghs-sgh/index\\_e.html](http://www.hc-sc.gc.ca/ahc-asc/intactiv/ghs-sgh/index_e.html)
10. Information from United Nations Website at [www.unece.org/trans/danger/publi/ghs/ghs\\_rev01/01files\\_e.html](http://www.unece.org/trans/danger/publi/ghs/ghs_rev01/01files_e.html)
11. Information about RoHS (Restriction of Use of Certain Hazardous Substances in Electrical and Electronic Equipments) was obtained from Website at [www.rohs.gov.uk](http://www.rohs.gov.uk)
12. 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](http://www.oehha.ca.gov/prop65.html)

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