6747 Campobello Rd., Mississauga, Ontario, L5N 2L7, Canada Tel: 905.363.4040 Toll Free: 800.758.7325 Fax: 905.363.0102

ICYNENESAFETY DATA SHEETProduct Name:ICYNENE LD-C-50[™] B-SIDE RESIN

Section 1:	Chemical, Product and Company Information
Product Name:	ICYNENE LD-C-50 [™] B-Side Resin (Component B)
	Also known as Classic (North America)
	Also known as H2Foam Lite [™] (Europe)
	ICYNENE LD-C-50 [™] is a trademark of Icynene Inc.
Product Use:	To be mixed with polymeric MDI at foam spray gun tip to create LD-C- 50^{TM} foam, a semi-rigid open cell polyurethane foam.
Product Code:	ICYNENE LD-C-50 [™] B-SIDE RESIN

Section 2:

Hazards Identification

Acute Toxicity: oral, Category 4 Acute Toxicity: Skin, Category 5 Skin Corrosion/Irritation, Category 1A Serious Eye Damage/Eye Irritation, Category 2B



Synonyms Date of first issue Version number Revision date

Company name Address Telephone Contact person Emergency telephone None. 10-August-2011 05 **2-June-2015**

Icynene Inc. 6747 Campobello Road, Mississauga, Ontario, L5Z 2L7 Canada 1-800-758-7325 or 905-363-4040 Icynene CANUTEC 613-996-6666

Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC as amended Classification: Xn;R22, Xi;R36/38, R43, R52-53 Hazard summary

Physical hazards: Not classified for physical hazards.

Health hazards: Harmful if swallowed. Irritating to eyes and skin. May cause sensitisation by skin contact.

Environmental hazards: Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Specific hazards: Irritating to eyes and skin. Irritating to mouth, throat, and stomach. May cause respiratory tract

irritation. Main symptoms: Irritating to mouth, throat, and stomach. Label elements

Label according to Directive 67/548/EEC or 1999/45/EC as amended

ICYNENE

SAFETY DATA SHEET Product Name: ICYNENE LD-C-50[™] B-SIDE RESIN

Section 3:

Composition and Ingredient Information

Ingredient	CAS #	Weight%	EC No. REACH Registration No. INDEX No.	Classification
Polyether Polyol	N/A Not Hazardous	13 – 30	N/A	N/A
Tris (2-chloro isopropyl) phosphate	13674-84- 5	30 – 60	17-2119396622- 32-0000	Xn;R22 Eye irritant 2 H319, Skin sensitive. 2 H315
2-(Dimethylamino)-ethanol	108-01-0	1 – 5	N/A	N/A
N,N-Bis[3- (dimethylamino)propylamine	6711-48-4	4 - 8	17-2119396699- 11-0000	Xn;R22, R43, N;R51-53 Acute toxic 4 H302, Acute toxic dermal 3 H311, Skin corrosion 1B H314

H-phrases	H301 Harmful if swallowed H312 May be harmful in contact with skin H315 Causes Skin irritation H319 Causes serious Eye irritation H314 Causes severe skin burns and eye damage
P-phrases	P264 Wash hands thoroughly after handling P270 do not eat, drink or smoke when using this product P312 call a poison center or doctor/physician if you fell unwell P280 wear protective gloves/protective clothing/eye protection/face protection.

Section 4:

First Aid Measures

<u>Eyes:</u>	Wash gently with flowing water for 20-30 minutes or until the chemical is removed. Eyelids should be held open while irrigating the eyes. Take care not to wash contaminated water into the unaffected eye or face. Consult medical personnel.
<u>Skin:</u>	Wash with gently flowing water for 20-30 minutes or until the chemical is removed. Take care not to rinse contaminated water onto unaffected skin. Contaminated clothing should be removed under running water. Consult medical personnel.
Inhalation:	Remove to fresh air. If not breathing, give mouth-to-mouth resuscitation. If breathing is difficult then give oxygen. If the heart has stopped, trained personnel should immediately begin CPR. Consult a physician. There has been no clinical experience with overexposure via the respiratory route.
Ingestion:	Do not induce vomiting. Never give anything by mouth if the victim is rapidly losing consciousness, or is unconscious or convulsing. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. If breathing or the heart has stopped, trained personnel should immediately begin artificial respiration or CPR. Consult a physician immediately.



Section 5:	Fire Fighting Measures
Flash Point:	Not Available
Method Used:	N.A.
Flammable Limits:	
LFL:	N.Av.
UFL:	N.Av.
Extinguishing Media:	Water, carbon dioxide, dry chemical or foam. Expended liquids upon the aftermath of fire should be contained for disposal. Prevent contamination of streams and drinking supplies.
Explosion Hazards:	Not sensitive to static or mechanical impact. Additional conditions that may lead to explosion are not available.
Fire Hazards:	Sudden reaction and fire may result when the product is mixed with an oxidizing agent. Sudden reaction and fire may result when the product is mixed with an isocyanate.
Hazardous Combustion Products	Hazardous combustion products would include oxides of carbon, nitrogen and phosphorous and acid halides.
Fire Fighting Equipment:	In confined areas, firefighters must wear a self-contained breathing apparatus to avoid breathing vapors, carbon monoxide and nitrogen oxide gases generated by combustion. Skin contact should be avoided.
Section 6:	Accidental Release Measures
<u>Action to Take for</u> Spills/Leaks:	Dike spills to prevent spreading and contamination of surface waters, ground waters and drinking supplies. Notify local health authorities and other appropriate agencies if such contamination should occur.
Section 7:	Handling and Storage

Must be protected from overheating and should ideally be stored at temperatures between 60°F-90°F (15°C-32°C). It should definitely be kept below 100°F (38°C) as exposure to temperatures above 100°F (38°C) accelerates material degradation, but does not create a hazardous decomposition product. It is advisable to keep the storage temperatures as low as possible within the above range, store the drums in a well ventilated area, and protect them from direct sunlight. Since component B can separate during storage, it should be mixed thoroughly prior to use, especially at higher temperature levels.

Section 8:	Exposure Controls/Personal Protection
Respiratory Protection:	Generally, respiratory protection is unnecessary provided there is adequate general ventilation. In poorly ventilated areas, a cartridge mask (National Institute for Occupational Safety and Health {NIOSH}) – approved for organic vapors is recommended. During emergencies, a self-contained breathing apparatus should be worn.
Skin Protection:	Avoid contact with the skin. Cuffed neoprene or butyl rubber gloves (or other impervious materials) are recommended. Wash hands thoroughly after handling or exposure. Launder or discard contaminated clothing. Discard contaminated leather articles.
Eye Protection:	Avoid contact with the eyes. Eye protection in the form of chemical safety goggles is recommended.

Section 9: Physical and Chemical Properties

Boiling Point:	Not Available
Vapour Pressure:	Not Available
Freezing Point:	Not Available
Vapour Density:	Not Available
Soluble in Water:	Miscible
Appearance:	White Liquid
Specific Gravity:	1.1 @ 25°C
Odour:	Amine Odour
<u>pH:</u>	11
<u>Viscosity:</u>	700 cps, 20 rpm, Brookfield S61 @ 25°C
Coefficient of Water/Oil Distribution	Not Available

Section 10:	Stability and Reactivity
Stability:	Stable under recommended storage conditions.
Incompatibility:	(Specific materials to avoid) Reacts with strong acids, isocyanates and oxidizing agents.
Hazardous Decomposition Products:	Shelf-life of product is six months. High heat or fire: nitric acid, ammonia, nitrogen oxides (NOx), carbon monoxide, carbon dioxide.
Hazardous Polymerization:	May occur on contact with isocyanates.

Section 11:	Toxicological Information
Skin Contact:	Irritant to the skin.
Skin Absorption:	The LD ₅₀ for skin absorption in rabbits is 2,111 mg/kg (calculated).
<u>Eye:</u>	Irritant to the eyes.
Systemic & Other Effects:	It is assumed by OSHA that an untested mixture presents the same health hazard as do the components that are present at one percent or a greater level.
	Health hazard information for all components in their pure form is therefore included as part of the SDS.
	Contact with the eyes or skin may cause severe irritation and pain. Prolonged contact may result in chemical burns and permanent damage.
	Material vapor in low concentrations can cause lacrimation, conjunctivitis and corneal edema when absorbed into the tissue of the eye from the atmosphere. Corneal edema may give rise to a perception of "blue haze" or "fog" around lights. The effect is temporary and has no known residual effect.
	Inhalation of vapors may cause irritation of the respiratory tract. Coughing and chest pain may result.
	Repeated and/or prolonged exposure to low concentrations of vapor may cause sore throat, eye irritation, nausea, faintness and/or headache that are temporary.
	Repeated and/or prolonged exposure at low levels may result in adverse respiratory effects, adverse skin effects or adverse eye effects.
	Medical conditions generally aggravated by exposure are:
Ingestion:	 asthma skin disorders and allergies eye disease chronic respiratory disease (bronchitis, emphysema) Single dose oral toxicity oral LD₅₀ for rats is 1,984 mg/kg (calculated).
Inhalation:	May cause respiratory sensitization in susceptible individuals. If heated or sprayed as an aerosol, excessive concentrations are attainable that could be hazardous. Excessive exposure may cause irritation of the eyes, upper respiratory tract and lungs.
	Literature reports an inhalation LC_{50} value for alkanolamine as 1641 ppm (4-hour, rat).
Section 12:	Ecological Information/Environmental Fate

Not available.

Section 13:		Spill, Leak and Disposal Procedures
<u>Major Spill:</u>		Call Icynene Inc. (800) 758-7325. If transportation spill involved call CANUTEC (613) 996-6666
<u>Minor Spill:</u>		Absorb the resin with sawdust or other absorbent. Scoop up solid absorbent for waste disposal. The area should then be washed down to dilute and remove the remaining traces of material. Alternatively, small surface spills of resin may be reacted with isocyanate. This is a non-hazardous, controlled, "neutralization" type reaction.
Disposal Meth	<u>nod:</u>	Follow all federal, provincial, state and local regulations.
Section 14:		Transport Information
Road:		
US DOT:		Not regulated.
CAN TDG:		Not regulated.
Rail or Vessel	<u>(ship):</u>	Product in containers must be prevented from movement i.e. "blocked".
<u>Air:</u>		"Non-DG" (Dangerous Goods), however consult specific air carrier as special packaging instructions often apply.
ADR RID AND IATA IMDG	The product is no The product is no The product is no	t covered by international regulation on the transport of dangerous goods. t covered by international regulation on the transport of dangerous goods. t covered by international regulation on the transport of dangerous goods. t covered by international regulation on the transport of dangerous goods. t covered by international regulation on the transport of dangerous goods.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Section 15:	Regulatory Information
CANADA:	
<u>CPR</u>	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.
WHMIS:	Classification: Class D2A
USA:	
State Regulations:	California Prop. 65: No ingredients listed.
Toxic Substances Contr	rol Act (TSCA): All ingredients are on the TSCA inventory or are not

Toxic Substances Control Act (TSCA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulations

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I - Not listed. Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II -Not listed. Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I -Not listed. Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 -Not listed. Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 -Not listed. Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 -Not listed. Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V -Not listed. Directive 96/61/EC concerning integrated pollution prevention and control (IPPC): Article 15, **European Pollution Emission Registery (EPER)** -Not listed Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List -Not listed. Other regulations This preparation is classified as dangerous according to Directive 1999/45/EC and its amendments. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. National regulations Follow national regulation for work with chemical agents. **Chemical safety assessment** No Chemical Safety Assessment has been carried out.

Section 16: Other Information

Manufacturer Disclaimer:

While the information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

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PREPARATION INFORMATION:

Revision Date:	June. 2, 2015
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HEALTH AND SAFETY STATEMENT FOR CERTIFIED ICYNENE SPRAYERS

Icynene products have an excellent health and safety record spanning more than 350,000 insulation projects over more than 25 years. Nonetheless, safe handling practices during and immediately following installation are required to eliminate the possibility of health effects from exposure to isocyanates. Asthma, other lung problems, and irritation of the nose and throat can result from inhalation of isocyanates. Direct contact with the skin and eyes can result in irritation. Different individuals will react differently to the same exposures; some will be more sensitive than others. Severe asthma attacks have been reported in some sensitized workers exposed repeatedly to isocyanates while not wearing proper protective equipment. Some reports indicate a reaction and sensitization can occur following a single, sustained occupational exposure to isocyanates without proper protective equipment above the OSHA permissible exposure limit. But sensitization might not occur immediately in some individuals. Consistent use of personal proper protective equipment to prevent exposure during spraying and within the 24 hourperiod after spraying is completed is critical to eliminating the health hazard. Once sensitization has occurred, a worker might not be able work safely with spray foam insulation again.

Sprayers, sprayer helpers, and anyone else present during spraying or within 24 hours after spraying is <u>complete</u>: You must wear proper Personal Protective Equipment (PPE) at all times during spray, including full-body-coverage, chemical-protective clothing and a NIOSH-certified respirator with fresh air supply. While spraying and for 24 hours after spraying is completed, no one must be allowed within 50 feet of the sprayed foam without wearing this type of PPE at all times. Adequate active, negative pressure ventilation (exhaust fans) of the job site must be in place during spray and for 24 hours after spray is complete.

Independent studies indicate that with 24 hours' active ventilation after spraying is completed, Icynene spray foam insulation is safely cured.

