



Icynene Inc.  
 6747 Campobello Rd.  
 Mississauga, ON L5N 2L7  
 Phone: (905) 363-4040  
[www.icynene.com](http://www.icynene.com)

**ICYNENE Classic Max™ (LD-C-50-v2)**

ICYNENE Classic Max™ (LD-C-50-v2) is a light density, open celled, flexible, 100% water-blown polyurethane foam insulation manufactured by Icynene Inc. The insulation is applied at a nominal density of 0.5 lb/cu ft. Classic Max™ (LD-C-50-v2) is used as a thermal insulation and air barrier material in buildings in accordance with the IRC and the IBC in buildings of Type V construction and may be applicable to Types I, II, III and IV construction. The insulation is for use in wall cavities, floor assemblies, ceiling assemblies and attics and crawl spaces.

**PHYSICAL PROPERTIES**

Characteristic	Test Method		Result	AC 377 Requirement
Core Density	ASTM D1622		0.5 pcf	As Reported
R - value per inch	ASTM C518		3.7 per in.	As Reported
Max. Thickness per Pass			14 inches	
Color of final foam			cream	
Water Vapor Permeance	ASTM E96		11 perms @ 5.5"	< 1 perm
100% water blown technology			yes	
Ozone Depleting			no	
Global Warming Potential			1	
Air Permeance	ASTM E283		0.009 L/s.m2 @ 3.5"	< 0.02 L/s.m2
Air Permeance	ASTM E2178		0.01 L/s.m2 @ 5.5"	< 0.02 L/s.m2
Dim. Stability -29° C, 28 days	ASTM D2126	VOL %	2.4%	15 % max.
Dim. Stability 80°C, 28 days	ASTM D2126	VOL %	-2.2%	15% max.
Dim. St. 70°C, 95% RH, 28 days	ASTM D2126	VOL %	0%	15% max.
Compressive Strength	ASTM D1621		NA	
Tensile Strength	ASTM D1623		NA	
Surface Burning FS @ 5"	ASTM E84		≤ 25	≤ 75
Surface Burning SDI @ 5"	ASTM E84		≤ 450	≤ 450
Commercial Fire Resistance	NFPA 285		Assembly Passed	
Commercial Fire Resistance	ASTM E119		1 Hour Rating	
DC-315 Thermal Barrier	NFPA 286	20 wet mils	> 15 minutes	15 minutes
Attic & Crawl Space walls & roof			No Coating Required	
Wall & Ceiling application	NFPA 286		walls - 7.5", ceiling - 11.5"	
Fire Propagation of exterior wall	NFPA 285		Passed	
Hourly rated wall assembly	ASTM E119		60 minutes	
Fungus Testing	ASTM C1338		no growth	

**Disclaimer:** Data presented in this document is based on tests and information, which we believe to be reliable. This document is provided for information purposes only and does not constitute a warranty, expressed or implied, including any warranty of merchantability or fitness. This data is relied upon at the sole discretion and judgement of user/reviewer.

It is the installers responsibility to ensure that the use and installation of this product complies with all applicable national and local building codes.



USA

# Technical Data Sheet

## ICYNENE Classic Max™ (LD-C-50-v2)

### LIQUID COMPONENTS PROPERTIES

Property	A-Side: Isocyanate	B-Side: Resin
Color	Brown	White
Viscosity @ 25° C (77°F)	130 - 350 cps	700 cps
Shelf Life*	12 months	6 months
Mixing ratio (volume)	100	100

\* Resin and Isocyanate should be stored at 60 to 85°F (15 to 30°C).

See MSDS for more information

### RECOMMENDED PROCESSING CONDITIONS

When the Classic Max™ (LD-C-50-v2) has been charged into the system, check all screens before spraying

**DO NOT MIX Classic Max™ resin with LD-C-50 resin**

Drum temperature in use: 80°F to 100°F (26°C to 38°C); **90°F (32°C) recommended**

Spray temperatures, primary heaters and hose heat: 120°F to 160°F (50°C to 70°C); **135°F (57°C) recommended in moderate application temperatures (60°F to 80°F) for best yield**

Upper service temperature: 200°F (93°C)

Spray equipment: Graco E-30, H-25 or equivalent, mixing chamber: AR 2929 (00) to AR 6060 (03)

Spray pressure (dynamic): 700 psi to 1500 psi

Distance from substrate: 12" to 18" (30 to 45 cm)

The spray gun shall always be held perpendicular to the substrate

To be sprayed in horizontal or vertical motion from bottom to top but need to overlap and build material to get desired thickness

### REACTIVITY PROFILE

Cream time	1-2 sec	End of Rise	4 -6 sec
------------	---------	-------------	----------

### HEALTH & SAFETY CONSIDERATIONS

#### Handling Recommendations

Use personal protective equipment (see MSDS)

Avoid all contact with skin and eyes

Do not inhale the vapors

Do not store in conditions outside of the recommended parameters

In case of a spill / leak, see MSDS.

For more information, please consult the MSDS

#### Application Safety

While spraying, always work with adequate ventilation.

Protective gloves, overalls, eye protection, safety shoes, hard hats and a properly fitting breathing apparatus supplying fresh air must be worn by the installers **(and others working within 25 feet of the installers) at all times while spraying.**

Persons with known respiratory allergies must avoid exposure to the isocyanate component.

If inhalation of the vapors occurs, remove the person from the working area to breathe fresh air and if breathing is still difficult, call a physician.

Avoid contact with eyes, skin and clothing.

In case of eye contact, immediately flush with large amounts of water for at least 15 minutes and call a physician immediately.

In case of skin contact, wash area with soap and water.

Wash any clothing that has come into contact with the isocyanate or resin before reuse.

#### Fire hazard

Fires involving either component may be extinguished with carbon dioxide, dry chemical or an inert gas. Application of large quantities of chemical spray is recommended for spill fires.

Personnel fighting the fire must be equipped with self-contained breathing apparatus.

## 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 hour-period 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 complete: 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.

