



# ICYNENE LD-R-50®



## Renewable-based Spray Foam Insulation – Responsibly Formulated for Superior Performance

ICYNENE LD-R-50 is a renewable-based, 0.5 lb., spray foam insulation and air barrier material. ICYNENE LD-R-50 exceeds the renewable content specification set by the USDA BioPreferred<sup>SM</sup> program and ICC-SAVE. Using high-yield castor oil material, ICYNENE LD-R-50 reduces the need for petroleum-based polyol. Castor oil is a natural ingredient that is safe enough for use in personal care products such as lip balm.

ICYNENE LD-R-50 is an environmentally preferable product that insulates and air-seals in one step for maximum energy conservation while minimizing the environmental impact during manufacturing and construction.

Significantly reducing air leakage means ICYNENE LD-R-50 contributes to a healthier, quieter and more comfortable indoor environment, while reducing heating and cooling costs by up to 50%.

## Key Application Areas

ICYNENE LD-R-50 is sprayed in place by Icynene Licensed Dealers and expands 100 times its initial volume to insulate and air-seal open wall cavities and ceilings, crawlspaces, rim joists, attics, and the underside of roofs.

ICYNENE LD-R-50 delivers a consistent air-seal in both wood and metal framed structures. The product addresses critical considerations for steel construction including simplicity of installation, thermal performance and condensation.

## CASTOR OIL: Environmental Overview\*

- Castor oil is 100% naturally filtered, no chemical additives required.
- Castor crops are non-irrigated (relying only on natural rainfall), saving scarce water supplies.
- Castor beans do not require pesticides or fungicides.
- Production process has low energy dependence, consisting of simply de-husking and pressing. Harvesting is manual.
- The castor oil used has a yield (by weight) of ~40% vs. ~17% yield with soya oil.
- Castor beans do not compete with food crops, as castor plants can be grown on marginal lands, which are not competitive with food production lands.
- Castor is a rapidly renewable material, as per USGBC definition, requiring a 10-year or less re-growth timeframe.

\* Source: Supplier



## Fulfilling Choices

Icynene offers fulfilling solutions through a portfolio of advanced and responsible building envelope products that anticipate changing design requirements, market conditions and customer needs.

## Ideal For Residential and Commercial Applications, Icynene Solutions Provide:

### Increased Energy Efficiency

Icynene products give you both insulating R-value and air barrier performance – allowing you to minimize 2 major sources of heat loss/gain. The result can be a reduction in heating and cooling costs of up to 50%.

### Improved Indoor Air Quality

Icynene's air-sealing capabilities minimizes the entry of airborne irritants such as allergens, drafts or humidity. Combined with proper mechanical ventilation, Icynene products assist occupants in controlling the quality of the indoor air that they breathe.

### Contribution to LEED points

Icynene spray foam insulation solutions are vital contributors towards a home or building obtaining critical LEED (Leadership in Energy and Environmental Design) points.

Always refer to the specification sheets on [Icynene.com](http://Icynene.com) for the most current information on the complete portfolio of Icynene products.

PROUD TO BE ASSOCIATED WITH:



**ICYNENE**

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Product information and specifications subject to change without notice. For the most current product information, please consult [Icynene.com](http://Icynene.com). ICYNENE LD-R-50® is a trademark for renewable-based, light density, open-celled, flexible, polyurethane foam insulation manufactured by Icynene Inc.