

SAFETY DATA SHEET

Section 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name or designation of the mixture ICYNENE LD-C-50™ B-Side Resin

Synonyms None.

Date of first issue 10-August-2011

Version number 01

Revision date - Supersedes date -

Relevant identified uses of the substance or mixture and uses advised against

Identified uses To be used in on-site spray foam application by mixing with polymeric methylene di-isocyanate (A-Side polyisocyanate, Base Seal™).

Uses advised against None known.

Details of the supplier of the safety data sheet

Supplier

Company name GMS Renewable Products

Address Ireland

Manufacturer

Company name Icynene Inc.

Address 6747 Campobello Road,
Mississauga, Ontario, L5Z 2L7
Canada

Telephone 1-800-758-7325 or 905-363-4040

e-mail Nxie@icynene.com

Contact person Icynene

Emergency telephone CANUTEC 613-996-6666, EST, available 24/7

Section 2: Hazards identification

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, R42, R43, 52-53

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

Contains: N'-[3-(dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine, Tris (1-chloro-2-propyl) phosphate

Harmful



R-phrases

R22 Harmful if swallowed.
R36/38 Irritating to eyes and skin.
R43 May cause sensitisation by skin contact.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases

S23 Do not breathe gas/fumes/vapour/spray.
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37 Wear suitable protective clothing and gloves.
S60 This material and its container must be disposed of as hazardous waste.

Supplemental label information None.

Other hazards Not assigned.

Section 3: Composition/information on ingredients

Mixture

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Tris (1-chloro-2-propyl) phosphate	30 - 70	13674-84-5 237-158-7	17-2119396622-32-0000		
Classification:	Xn;R22				
N'-[3-(dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine	3 - 10	6711-48-4 229-761-9	17-2119396699-11-0000		
Classification:	Xn;R22, R36/38, R43, N;R51-53				

Composition comments The full text for all R-phrases is displayed in Section 16. All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Section 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Description of first aid measures

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Get medical attention, if needed.

Skin contact Remove contaminated clothes and rinse skin thoroughly with water for at least 15 minutes. Get medical attention if irritation develops or persists.

Eye contact Remove any contact lenses and open eyes wide apart. Get medical attention if irritation develops or persists.

Ingestion Have victim rinse mouth thoroughly with water. Do not induce vomiting without advice from control centre. Do not use mouth-to-mouth method if victim ingested the substance. If ingestion of a large amount does occur, call a poison control centre immediately.

Most important symptoms and effects, both acute and delayed Irritation of eyes and mucous membranes. Skin irritation. Irritation of nose and throat may occur.

Indication of any immediate medical attention and special treatment needed Treat symptomatically.

Section 5: Firefighting measures

General fire hazards The product is not flammable.

Extinguishing media

Suitable extinguishing media Carbon dioxide, regular foam, dry chemical, water spray, or water fog.

Unsuitable extinguishing media None known.

Special hazards arising from the substance or mixture Fire or high temperatures create: Carbon oxides. Nitrogen oxides. Phosphorus oxides.

Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special firefighting procedures Move containers from fire area if you can do it without risk. Prevent runoff from fire control or dilution from entering streams, sewers or drinking water supply.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Avoid inhalation of vapours and contact with skin and eyes. Wear protective clothing as described in Section 8 of this MSDS.

For emergency responders Use personal protection as recommended in section 8 of the SDS.

Environmental precautions Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Methods and material for containment and cleaning up Keep unnecessary personnel away.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use.

Reference to other sections For personal protection, see section 8. For waste disposal, see section 13.

Section 7: Handling and storage

Precautions for safe handling Avoid inhalation of vapors and contact with skin, eyes and clothing. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

Conditions for safe storage, including any incompatibilities Protect from direct sunlight. Store between 15°C (60°F) and 32°C (90°F) to avoid separation and prolong shelf life. Do not store with strong acids, bases and isocyanates.

Specific end use(s) Not available.

Section 8: Exposure controls/personal protection

Control parameters

Recommended monitoring procedures Follow standard monitoring procedures.

DNEL Not available.

PNEC Not available.

Exposure controls

Appropriate engineering controls Ensure adequate ventilation, especially in confined areas. Provide easy access to water supply and eye wash facilities.

Individual protection measures, such as personal protective equipment

General information Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection Chemical goggles are recommended.

Skin protection

- Hand protection

Wear protective gloves. Neoprene or butyl rubber gloves are recommended.

- Other

Wear suitable protective clothing.

Respiratory protection

No personal respiratory protective equipment normally required. In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type A2/P2).

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

Hygiene measures

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. Do not eat, drink or smoke when using the product. Handle in accordance with good industrial hygiene and safety practices.

Environmental exposure controls Not available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance White liquid.

Physical state Liquid.

Form Liquid.

Colour White

Odour Amine-like.

Odour threshold Not available.

pH 11

Melting point/freezing point Not available.

Boiling point, initial boiling point, and boiling range	Not available.
Flash point	> 93 °C (> 199,4 °F)
Auto-ignition temperature	Not applicable.
Flammability (solid, gas)	Not available.
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Oxidising properties	Not applicable.
Explosive properties	Not applicable.
Explosive limit	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Evaporation rate	Not applicable.
Relative density	1,1
Relative density temperature	25 °C (77 °F)
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Decomposition temperature	Not available.
Viscosity	700 cP
Viscosity temperature	25 °C (77 °F)
Percent volatile	Not available.
Other data	
Miscible (water)	Partially miscible
Other information	No relevant additional information available.

Section 10: Stability and reactivity

Reactivity	Reacts with strong acids, isocyanates and oxidizing agents.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Polymerization may occur on contact with isocyanates.
Conditions to avoid	Heat and direct sunlight.
Incompatible materials	Strong oxidising agents. Isocyanates Strong acids.
Hazardous decomposition products	Fire or high temperatures create: Ammonia. Nitric acid Carbon oxides. Nitrogen Oxides.

Section 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
Information on likely routes of exposure	
Ingestion	Ingestion may cause irritation and malaise.
Inhalation	May cause irritation to the respiratory system.
Skin contact	Irritating to skin.
Eye contact	Irritating to eyes.
Symptoms	Irritation of eyes and mucous membranes. Skin irritation. Irritation of nose and throat.
Information on toxicological effects	
Acute toxicity	Causes skin and eye irritation. May cause respiratory tract irritation.
Skin corrosion/irritation	Irritating to skin.
Serious eye damage/eye irritation	Irritating to eyes.
Respiratory sensitisation	May cause inhalation hypersensitivity (occupational asthma) in sensitive individuals.
Skin sensitisation	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.

Reproductive toxicity	Not classified.
Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity - repeated exposure	Not available.
Aspiration hazard	Not classified.
Mixture versus substance information	Not available.
Other information	This product has no known adverse effect on human health.

Section 12: Ecological information

Toxicity	No toxicity data noted for the ingredient(s).
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility	No data available.
Environmental fate - Partition coefficient	Not available.
Mobility in soil	No data available.
Results of PBT and vPvB assessment	No data available.
Other adverse effects	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Section 13: Disposal considerations

Waste treatment methods	
Residual waste	Dispose in accordance with all applicable regulations.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.
EU waste code	08 04 09*
Disposal methods/information	This material and its container must be disposed of as hazardous waste. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not dispose of waste into sewer. Do not discharge into drains, water courses or onto the ground. Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 14: Transport information

ADR

The product is not covered by international regulation on the transport of dangerous goods.

RID

The product is not covered by international regulation on the transport of dangerous goods.

ADN

The product is not covered by international regulation on the transport of dangerous goods.

IATA

The product is not covered by international regulation on the transport of dangerous goods.

IMDG

The product is not covered by international regulation on the transport of dangerous goods.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

Annex II of MARPOL73/78 and the IBC Code

Section 15: Regulatory information

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 Registry (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

List of abbreviations	DNEL: Derived No-Effect Level. PNEC: Predicted No-Effect Concentration. PBT: Persistent, bioaccumulative and toxic. vPvB: Very Persistent and very Bioaccumulative.
References	Not available.
Information on evaluation method leading to the classification of mixture	The mixture is classified based on test data for physical hazards. The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available. For details, refer to Sections 9, 11 and 12.
Wording of the R-phrases in sections 2 and 3	R22 Harmful if swallowed. R36/38 Irritating to eyes and skin. R43 May cause sensitisation by skin contact. R51 Toxic to aquatic organisms. R52 Harmful to aquatic organisms. R53 May cause long-term adverse effects in the aquatic environment.
Training information	Follow training instructions when handling this material.
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.
Issue date	10-August-2011
Revision date	10-August-2011
Print date	10-August-2011