Lorchem

Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Common Name	**UNILAC 100**
Supplier	LORCHEM INTERNATIONAL. 150 rue Aimé-Vincent Vaudreuil, Quebec (J7V 5V5) 450-424-4000
Synonym	Polyurethane top coat
Trade name	Not available.
Material Uses	Coatings: Wood finishing
Manufacturer	LORCHEM INTERNATIONAL 150 rue Aimé-Vincent Vaudreuil, Quebec (J7V 5V5) 450-424-4000

Code	48020T25
MSDS#	Not available.
Validation Date	**5/26/2013**
Print Date	5/26/2013
Responsible Name	**LORCHEM INTERNATIONAL.**

In Case of Emergency Emergency phone: Chemtrec: 1-800-424-9300

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits
1) Denatured alcohol 2A anhydrous		6-16	Not available.
2) Isobutyl acetate	110-19-0	10-21	Not available.
3) Isopropyl alcohol 99%	67-63-0	1-10	Not available.
4) N-butyl acetate	123-86-4	2-12	Not available.
5) Methyl n-amyl ketone	110-43-0	6-16	Not available.
6) Acetone	67-64-1	2-12	Not available.
7) Ester EEP	763-69-9	2-12	Not available.

Section 3. Hazards Identification

Physical State and Appearance Liquid

Emergency Overview WARNING!

Keep away from heat, sparks and flame. Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Routes of Entry Absorbed through skin. Dermal contact. Inhalation. Ingestion.

Potential Acute Health Effects

Eyes Slightly hazardous in case of eye contact (irritant).

Skin Very hazardous in case of skin contact (permeator). Hazardous in case of skin contact (irritant). Slightly hazardous in case of skin contact (sensitizer). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Inhalation Hazardous in case of inhalation.

Ingestion Hazardous in case of ingestion.

Potential Chronic Health Effects

CARCINOGENIC EFFECTS Not available.
MUTAGENIC EFFECTS Not available.
TERATOGENIC EFFECTS Not available.

Medical Conditions Aggravated by Overexposure: Repeated or prolonged exposure is not known to aggravate medical condition.

Overexposure /Signs/Symptoms Not available.

See Toxicological Information (section 11)

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Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention immediately.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
Notes to Physician	Not available.

Section 5. Fire Fighting Measures

Flammability of the Product	Flammable.
Auto-ignition Temperature	The lowest known value is 404°C (759.2°F) (Methyl ethyl ketone).
Flash Points	The lowest known value is CLOSED CUP: -9°C (15.8°F). OPEN CUP: -4°C (24.8°F). (Methyl ethyl ketone)
Flammable Limits	The greatest known range is LOWER: 1.8% UPPER: 10% (Methyl ethyl ketone)
Products of Combustion	These products are carbon oxides (CO, CO2).
Fire Hazards in Presence of Various Substances	Highly flammable in presence of open flames and sparks. Flammable in presence of heat, of oxidizing materials, of combustible materials. Slightly flammable to flammable in presence of reducing materials. Non-flammable in presence of moisture.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	Flammable liquid, soluble or dispersed in water. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam, water spray or fog.
Protective Clothing (Fire)	Be sure to use an approved/certified respirator or equivalent.
Special Remarks on Fire Hazards	Vapor may travel considerable distance to source of ignition and flash back.
Special Remarks on Explosion Hazards	None

Section 6. Accidental Release Measures

Small Spill and Leak	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
Large Spill and Leak	Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

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Section 7. Handling and Storage

Handling	Provide good ventilation of the workroom and exhaust at the place of work. Keep away from heat and sources of ignition as well as from open fire. Observe the local safety regulations. The opened drums must be well closed with care and stand-up to avoid any spilling.
Storage	Store under cool, well ventilated, dry conditions with strict exclusion of light. Protect from flames, sparks and shocks. Keep container tightly closed.

Section 8. Exposure Controls/Personal Protection

Engineering Controls Use only in well ventilated areas.

Personal Protection

Eyes Safety glasses.

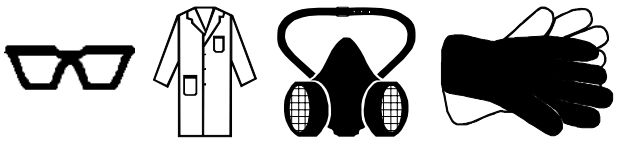
Body Lab coat.

Respiratory Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Hands Gloves.

Feet Not applicable.

Protective Clothing (Pictograms)



Personal Protection in Case of a Large Spill Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product.

Product Name	Exposure Limits
1) Denatured alcohol 2A anhydrous	Not available.
2) Isobutyl acetate	Not available.
3) Isopropyl alcohol 99%	Not available.
4) N-butyl	Not available.
5) Methyl n-amyl ketone	Not available.
6) Acetone	Not available.
7) Ester EEP	Not available.

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid
Molecular Weight	Not applicable.
Molecular Formula	Not applicable.

Odor	Solvent
Taste	Not available.
Color	Transparent

pH (1% Soln/Water)	Neutral.
Boiling/Condensation Point	The lowest known value is 79.6 (175.3°F) (Methyl ethyl ketone). Weighted average: 106.97°C (224.5°F)
Melting/Freezing Point	May start to solidify at 8.63 (47.5°F) based on data for: Methyl ethyl ketone. Weighted average: -81.57°C (-114.8°F)
Critical Temperature	N/A
Specific Gravity	0.89
Vapor Pressure	Heavier than air
Vapor Density	The highest known value is 4 (Air = 1) (Isobutyle acetate). Weighted average: 3.1 (Air = 1)

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Volatility	Volatile .
Odor Threshold	The highest known value is 0.25 ppm (METHYL ETHYL KETONE)
Evaporation Rate	Slower than Isobutyl Acetate
VOC	549 (g/l).
Viscosity	18 + 1 second. Ford Cup #4 at 77°F (25°C)
$LogK_{ow}$	The product is more soluble in oil.
Ionicity (in Water)	N/A
Dispersion Properties	See solubility in water, methanol, diethyl ether, n-octanol.
Solubility	In solvents
Physical Chemical Comments	Paint Related Material

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Conditions of Instability	N/A
Incompatibility with Various Substances	Highly reactive with oxidizing agents, organic materials. Reactive with reducing agents, acids, alkalis. Slightly reactive to metals. Non-reactive with moisture.
Hazardous Decomposition Products	N/A
Hazardous Polymerization	Not available.

Section 11. Toxicological Information

Toxicity to Animals	Acute oral toxicity (LD50): 2600 mg/kg [Rat.]. (Toluene). Acute dermal toxicity (LD50): 12210 mg/kg [Rabbit.]. (Toluene).
Chronic Effects on Humans	Causes damage to the following organs: blood, kidneys, the nervous system, liver.
Other Toxic Effects on Humans	Very hazardous in case of skin contact (permeator). Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (sensitizer).
Special Remarks on Toxicity to Animals	None
Special Remarks on Chronic Effects on Humans	Inhalation of vapors may cause dizziness, an irregular heartbeat, narcosis, nausea or asphyxiation. (Toluene)
Special Remarks on Other Toxic Effects on Humans	Exposure can cause lung irritation, chest pain and oedema which may be fatal. (Toluene)

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	N/A
Biodegradable/OECD	Not available.
Mobility	Not available.
	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

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Toxicity of the Products of Biodegradation	The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation	None

Section 13. Disposal Considerations

Waste Information	Dispose in observation of local regulations. Don't abandon the product in ambient.
Waste Stream	N/A

Consult your local or regional authorities.

Section 14. Transport Information

DOT Classification	Class 3: Flammable liquid. 
	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound) (Methyl ethyl ketone)
	1263
	II
Marine Pollutant	Not available.
Hazardous Substances Reportable Quantity	Not available.
Special Provisions for Transport	Not available.
TDG Classification	Class 3: Flammable liquid.
ADR/RID Classification	Class 3: Flammable liquid A.
IMO/IMDG Classification	CLASS 3.1: Flammable liquid (Low flashpoint group of liquids having a flashpoint below -18°C (0°F) c.c.).
ICAO/IATA Classification	Class 3: Flammable liquid.

Section 15. Regulatory Information

HCS Classification	Class: Flammable liquid having a flash point lower than 37.8°C (100°F).
U.S. Federal Regulations	TSCA: No products were found. SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found. SARA 313 toxic chemical notification and release reporting: No products were found. Clean water act (CWA) 307: No products were found. Clean water act (CWA) 311: No products were found. Clean air act (CAA) 112 accidental release prevention: No products were found. Clean air act (CAA) 112 regulated flammable substances: No products were found. Clean air act (CAA) 112 regulated toxic substances: No products were found.
International Regulations	
WHMIS (Canada)	CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).
	CEPA DSL: All products were found.
EINECS	Not available.

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DSCL (EEC)	R11- Highly flammable. R38- Irritating to skin. R41- Risk of serious damage to eyes.
International Lists	No products were found.
State Regulations	No products were found. California prop. 65: No products were found.

Section 16. Other Information

Label Requirements

Hazardous Material Information System (U.S.A.)

Health	*	3
Fire Hazard		3
Reactivity		1
Personal Protection		H

National Fire Protection Association (U.S.A.)

References	If you need references concerning this product, we will be pleased to give you the information on your request.
Other Special Considerations	Revised: 5/26/2013.

Validated by LORCHEM INTERNATIONAL. on 5/26/2013.

Verified by LORCHEM INTERNATIONAL..

Printed 5/26/2013

Emergency phone: Chemtrec: 1-800-424-9300