Safety Data Sheet

Issue Date: 01-Jul-2004	Revision Date:	03-Jul-2015		Ver	sion	1
	1. IDENT	IFICATION				
Product Identifier Product Name	ISOPROPYL ALCOHOL					
Other means of identification SDS #	LBI-070					
Product Code UN/ID No	481 UN1219					
Recommended use of the chemi Recommended Use	cal and restrictions on use Solvent.					
Details of the supplier of the safe Manufacturer Address Lawton Brothers, INC. 2515 Dinneen Ave. P.O. Box 547635 Orlando, FL 32854-7635 Ph: 1-407-291-2501 Emergency Telephone Number						
Emergency Telephone (24 hr)	INFOTRAC 1-352-323-3 1-800-535-5053 (North A					
	2. HAZARDS I	DENTIFICATION				
Appearance Water clear liquid	Physical S	tate Liquid		Odor	Alcol	nol
<u>Classification</u>						
Acute toxicity - Oral			Category 4			
Serious eye damage/eye irritation			Category 2			
Specific target organ toxicity (single Flammable Liquids	e exposure)		Category 3 Category 2			
Hazards Not Otherwise Classifie May be harmful if inhaled						

May be harmful if inhaled May be harmful in contact with skin

<u>Signal Word</u> Danger

Hazard Statements

Harmful if swallowed Causes serious eye irritation May cause drowsiness or dizziness Highly flammable liquid and vapor



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Keep away from heat/sparks/open flames/hot surfaces. — No smoking Keep container tightly closed Ground/bond container and receiving equipment Use explosion-proof equipment Use only non-sparking tools Take precautionary measures against static discharge Wear protective gloves/protective clothing/eye protection/face protection Keep cool

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Get medical advice / attention IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a poison center or doctor/physician if you feel unwell IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Isopropyl Alcohol	67-63-0	90-100

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

General Advice Provide this SDS to medical personnel for treatment.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately.

Skin Contact	Wash off immediately with soap and plenty of water. If skin irritation occurs: Get medical advice/attention.
Inhalation	Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician / poison center if individual's condition declines or if symptoms persist.
Ingestion	Do not induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Most important symptoms and effects

Symptoms May cause eye, skin, and respiratory tract irritation. Exposed individuals may experience eye tearing, redness and discomfort. Overexposure by inhalation may cause CNS depression- drowsiness, dizziness, confusion or loss of coordination. Harmful if inhaled.

Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Highly flammable liquid and vapor.

Hazardous Combustion Products Carbon oxides.

Sensitivity to Static Discharge Take precautionary measures against static discharge.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protection recommended in Section 8. Remove all sources of ignition.
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Environmental Precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so. Soak up and contain spill with an ine (i.e. vermiculite, dry sand or earth) absorbent material.	
Methods for Clean-Up	Use clean non-sparking tools to collect absorbed material. Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations.	

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. Use personal protection recommended in Section 8. Contaminated work clothing should not be allowed out of the workplace. Avoid breathing dust/fume/gas/mist/vapors/spray. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Ground/bond container and receiving equipment. Take precautionary measures against static discharges. Use non-sparking hand tools and explosion-proof electrical equipment. Use only with adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl Alcohol	STEL: 400 ppm	TWA: 400 ppm	IDLH: 2000 ppm
67-63-0	TWA: 200 ppm	TWA: 980 mg/m ³	TWA: 400 ppm
		(vacated) TWA: 400 ppm	TWA: 980 mg/m ³
		(vacated) TWA: 980 mg/m ³	STEL: 500 ppm
		(vacated) STEL: 500 ppm	STEL: 1225 mg/m ³
		(vacated) STEL: 1225 mg/m ³	

Appropriate engineering controls

Engineering Controls	Apply technical measures to comply with the occupational exposure limits. Maintain eye wash fountain and quick-drench facilities in work area.
Individual protection measures, su	uch as personal protective equipment
Eye/Face Protection	Chemical safety goggles/faceshield.
Skin and Body Protection	Chemical impervious gloves. Boots, aprons needed for protection against spill / splashes.
Respiratory Protection	Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator.
General Hygiene Consideration	ns Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical	State
Appearar	nce
Color	

Liquid Water clear liquid Clear

Odor Odor Threshold Alcohol Not determined

pHNot availableMelting Point/Freezing PointNot determinedBoiling Point/Boiling Range82.22 °C / 180 °FFlash Point12.77 °C / 55 °FTCCEvaporation Rate1.7(butyl acetate = 1)Flammability (Solid, Gas)Not determinedUpper Flammability Limits12.1%Lower Flammability Limit2.5%Vapor PressureNot determinedVapor Density2.1Specific Gravity0.786Water Solubility in other solventsNot determinedDatificing CoefficientNot determined	Property	Values	Remarks • Method
Boiling Point/Boiling Range82.22 °C / 180 °FFlash Point12.77 °C / 55 °FTCCEvaporation Rate1.7(butyl acetate = 1)Flammability (Solid, Gas)Not determinedUpper Flammability Limits12.1%Lower Flammability Limit2.5%Vapor PressureNot determinedVapor Density2.1Specific Gravity0.786Water Solubility in other solventsNot determined	pH	Not available	
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Upper Flammability Limits12.1%Lower Flammability Limit2.5%Vapor PressureNot determinedVapor Density2.1Specific Gravity0.786Water SolubilityMiscible in waterSolubility in other solventsNot determined	Evaporation Rate	1.7	(butyl acetate = 1)
Lower Flammability Limit2.5%Vapor PressureNot determinedVapor Density2.1Specific Gravity0.786Water SolubilityMiscible in waterSolubility in other solventsNot determined	Flammability (Solid, Gas)	Not determined	
Vapor PressureNot determinedVapor Density2.1Specific Gravity0.786Water SolubilityMiscible in waterSolubility in other solventsNot determined	Upper Flammability Limits	12.1%	
Vapor Density2.1(Air=1)Specific Gravity0.786Water SolubilityMiscible in waterSolubility in other solventsNot determined	Lower Flammability Limit	2.5%	
Specific Gravity0.786Water SolubilityMiscible in waterSolubility in other solventsNot determined	Vapor Pressure	Not determined	
Water Solubility Miscible in water Solubility in other solvents Not determined	Vapor Density	2.1	(Air=1)
Solubility in other solvents Not determined	Specific Gravity	0.786	
	Water Solubility	Miscible in water	
Partition Coofficient Not determined	Solubility in other solvents	Not determined	
Faithon Coencient Not determined	Partition Coefficient	Not determined	
Auto-ignition Temperature Not determined	Auto-ignition Temperature	Not determined	
Decomposition Temperature Not determined	Decomposition Temperature	Not determined	
Kinematic Viscosity Not determined		Not determined	
Dynamic Viscosity Water thin	Dynamic Viscosity	Water thin	
Explosive Properties Not determined	Explosive Properties	Not determined	
Oxidizing Properties Not determined	Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Heat, flames, ignition sources and incompatibles.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	
Eye Contact	Causes serious eye irritation.
Skin Contact	May be harmful in contact with skin.
Inhalation	May cause drowsiness or dizziness. May be harmful if inhaled.
Ingestion	Harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Isopropyl Alcohol	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h
67-63-0			

Information on physical, chemical and toxicological effects

Symptoms

Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

OSHA	NTP	IARC	ACGIH	Chemical Name
Х		Group 3		Isopropyl Alcohol
		Group 3		Isopropyl Alcohol 67-63-0

Legend

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

STOT - single exposure

May cause drowsiness or dizziness.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Isopropyl Alcohol 67-63-0	1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50	9640: 96 h Pimephales promelas mg/L LC50 flow-through 1400000: 96 h Lepomis macrochirus µg/L LC50 11130: 96 h Pimephales promelas mg/L LC50 static		13299: 48 h Daphnia magna mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Isopropyl Alcohol	0.05
67-63-0	

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Isopropyl Alcohol	Toxic
67-63-0	Ignitable

14. TRANSPORT INFORMATION

Please see current shipping paper for most up to date shipping information, including

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Isopropyl Alcohol	Present	Х		Present		Present	Х	Present	Х	Х

Legend:

Note

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Isopropyl Alcohol - 67-63-0	67-63-0	90-100	1.0

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Isopropyl Alcohol	Х	Х	Х
67-63-0			

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability Not determined	Instability Not determined	Special Hazards Not determined
<u>HMIS</u>	Health Hazards	Flammability 3	Physical Hazards 0	Personal Protection Not determined
Issue Date: Revision Date: Revision Note:	01-Jul-200 03-Jul-201 New forma	5		

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet