SAFETY DATA SHEET

Issuing Date: 3-Feb-2016 **Revision Date: 28-Jul-2016** **Revision Number: 3**

1. IDENTIFICATION OF THE SUBSTANCE/COMPANY INFORMATION

Product Identifier

Product Name: Isopropyl alcohol 50%

Other means of identification

Synonyms

Recommended use of chemical and restrictions on use

Recommended Use

Uses advised against

Details of supplier of the Safety Data Sheet

Distributor

Delon Laboratories (1990) Inc.
Pointe-Claire, QC, Canada, H9R1E2

Emergency Telephone Number

Company Emergency Number 514-685-9966

24 Hour Number: 613-996-6666 (CANUTEC)

2. HAZARDS IDENTIFICATION

Classification

Flammable Liquid – Category 2
Specific Target Organ Toxicity (Single Exposure) – Category 3
Target Organs – Central nervous system (CNS)
Eye Irritation – Category 2A
Skin Irritation – Category 3

Label Elements

Signal word: Danger

Hazard Statements

May cause drowsiness or dizziness.
Highly flammable liquid and vapor.
Causes serious eye irritation.
May form explosive mixtures in air.
Causes mild skin irritation.

Precautionary Statements – Prevention

If medical advice is needed, have the product container or label at hand.
Keep out of the reach of children.
Read label before use.
Keep away from heat, hot surfaces, sparks, open flames and other sources. No smoking.
Keep container tightly closed.
Keep cool.
Use explosion-proof electrical/ventilating/lighting equipment when dealing with large quantities.
Use non-sparking tools.
Take action to prevent static discharges.
Wash hands thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

Precautionary Statements – Response

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: get medical advice/attention.

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable and breathing. If symptoms persist contact a physician.

Ingestions

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

Fire

In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Spill

Wash any contaminated clothing before reuse.
Collect spillage.

Precautionary Statements – Storage

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

Precautionary Statements – Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazards not otherwise classified (HNOC)

N/A

Unknown Toxicity

N/A

Other information
N/A

Interaction with other Chemicals

N/A

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight - %	Trade Secret
Isopropyl alcohol	67-63-0	50	*

***** The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General Advice

Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

Eye Contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Skin Contact

Wash off with soap and plenty of water. Remove contaminated clothing and shoes. Consult a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Self-protection of the first aider

N/A

Most important symptoms and effects, both acute and delayed

Breathing difficulties. . Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Indication of any immediate medical attention and special treatment needed

N/A

Notes to Physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use water spray to cool unopened containers. Cool closed containers exposed to fire with water spray.

Unsuitable Extinguishing Media

Water may be ineffective. Do not use a solid water stream as it may scatter and spread fire.

Specific Hazards Arising from the Chemical

Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Uniform Fire Code

N/A

Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO_2).

Explosion Data

Sensitivity to Mechanical Impact

N/A

Sensitivity to Static Discharge

N/A

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. Thermal decomposition can lead to release of irritating gases and vapors.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Use personal protective equipment. Ensure adequate ventilation. Avoid breathing vapours, mist or gas. Remove all sources of ignition. Evacuate personnel to safe areas. Take precautionary measures against static discharges. Do not get in eyes, on skin, or on clothing. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Protective Equipment

Wear protective gloves/ protective clothing, eye protection/ face protection.

Emergency Procedures

Remove all sources of ignition. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment.

Other Information

N/A

Environmental Precautions

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and material for containment and cleaning up

Remove all sources of ignition. Clean spilled product with inert absorbent material. Keep in suitable, closed containers for disposal. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

7. HANDLING AND STORAGE

Precautions for safe Handling

Handling

Wear personal protective equipment. Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Do not ingest. Use spark-proof tools and explosion-proof equipment.

Conditions for safe storage, including any incompatibilities

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Store product in flammables area. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Handle and store under inert gas. Hygroscopic.

Incompatible Products

Strong oxidizing agents, Strong acids, Acid anhydrides, Acid chlorides.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Exposure Guidelines

Chemical Name	ACGIH	OSHA	NIOSH
Isopropyl alcohol	STEL: 400 ppm TWA: 200 ppm	STEL: 500 ppm TWA: 400 ppm	STEL: 500 ppm TWA: 400 ppm

Chemical Name	Quebec	Ontario
Isopropyl alcohol	TWAEV: 400 ppm STEV: 500 ppm	STEV:400 ppm TWAEV:200 ppm

Other Exposure Guidelines

N/A

Appropriate Engineering Controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Use mechanical exhaust or laboratory fumehood to avoid exposure.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and Body Protection

Impervious clothing, Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.
Appearance
Color: Colorless.
Odor: Characteristic odor.

Property
pH: N/A
Melting/freezing Point: N/A
Boiling point/boiling range: 82°C
Flash Point: Closed cup: 13°C
Flammability (solid,gas): N/A
Flammability Limit in air
Upper flammability limit: N/A
Lower flammability limit: N/A
Vapor Pressure: N/A
Specific Gravity: 0.84
Water Solubility: Completely soluble.
Partitions coefficient: N/A
Autoignition temperature: N/A
Decomposition temperature: N/A

Kinematic viscosity: N/A

Other Information
Softening Point: N/A
VOC Content (%): N/A
Particle Size: N/A
Particle Size Distribution: N/A

10. STABILITY AND REACTIVITY

Reactivity

None known, based on information available.

Chemical Stability

Hygroscopic.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Incompatible products. Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible Materials

Acids and moisture.

Hazardous Decomposition Products

Carbon monoxide (CO), Carbon dioxide (CO2).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation

N/A

Eye Contact

N/A

Skin Contact

N/A

Ingestion

N/A

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Isopropyl Alcohol	4797 mg/kg (Dog)	12800 mg/kg (Rabbit)	73 mg/l, 4 hours (Rat)

Information on toxicological effects

Symptoms

N/A

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

Sensitization

N/A

Mutagenic Effects

Carcinogenicity

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl Alcohol	A4	Group 3	-	-

Reproductive Toxicity

N/A

STOT – single exposure

Inhalation, Oral - May cause drowsiness or dizziness.

STOT – repeated exposure

Chronic Toxicity

N/A

Target Organ Effects

N/A

Aspiration Hazard

N/A

Numerical Measures of Toxicity Product Information

N/A

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Species	Test Results
Isopropyl alcohol	Crustacea (Daphnia magna)	13299 mg/l, 48 h (EC_{50})
	Fish (Lepomis macrochirus)	>1400 mg/l, 96 h (LC_{50})
	Fish (Rasbora heteromorpha)	4200 mg/l, 96 h (LC_{50})

Persistence and Degradability

N/A

Bioaccumulation

No bioaccumulation is to be expected

Mobility

Chemical Name	Log Pow
Isopropyl alcohol	0.05

Other adverse effects

N/A

13. DISPOSAL CONSIDERATIONS

Waste treatment Methods

Disposal methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local/regional/national/international hazardous waste regulations to ensure complete and accurate classification.

Contaminated packaging

Dispose of as unused product.

US EPA Waster Number

N/A

California Hazardous Waste Codes
N/A

14. TRANSPORT INFORMATION

DOT
UN-No. UN1219
Proper Shipping Name: ISOPROPYL ALCOHOL
Hazard Class: 3
Packing Group: II

TDG
UN-No. UN1219
Proper Shipping Name: ISOPROPYL ALCOHOL
Hazard Class: 3
Packing Group: II

IATA
UN-No. UN1219
Proper Shipping Name: ISOPROPYL ALCOHOL
Hazard Class: 3
Packing Group: II

IMDG/IMO
UN-No. UN1219
Proper Shipping Name: ISOPROPYL ALCOHOL
Hazard Class: 3
Packing Group: II

15. Regulatory Information

International Inventories
N/A

US Federal Regulations
United States inventory (TSCA 8b): This material is listed or exempted.
SARA 313:

	Product name	CAS number	%
Form R - Reporting requirements	Isopropyl alcohol	67-63-0	50
Supplier notification	Isopropyl alcohol	67-63-0	50

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

SARA 311/312 Hazard Categories
Fire hazard, Immediate (acute) health hazard.
CWA (Clean Water Act): N/A

CERCLA: N/A

US State Regulations
N/A
California Proposition 65
Not listed.
U.S. State Right to Know Regulations
N/A

EPA Pesticide Registration Number: N/A

EPA Statement: N/A

International Regulations
N/A

Canada
WHMIS Hazard Class
Class B-2: Flammable liquid Class.
D-2B: Material causing other toxic effects (Toxic).

16. OTHER INFORMATION

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Revision Note

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