# FLINN SCIENTIFIC, INC. Material Safety Data Sheet (MSDS)

**MSDS #:** 420.00

**Revision Date:** July 5, 2012

#### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### **Isopropyl Alcohol**

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

#### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Isopropyl alcohol

Synonym: 2-propanol, rubbing alcohol

CAS#: 67-63-0

#### **SECTION 3 — HAZARDS IDENTIFICATION**

Clear, colorless liquid. Rubbing alcohol odor.

Irritant to body tissues. Slightly toxic by ingestion, inhalation, and skin absorption.

The single lethal dose for a human adult is about 250 mL, although as little as 100 mL can be fatal. Although isopropyl alcohol is slightly toxic by definition, teachers should be alert to students

attempting to drink this "alcohol" on a dare.

Class 1B flammable liquid.

FLINN AT-A-GLANCE

Health-1

Flammability-3

Reactivity-1

Exposure-1

Storage-3

0 is low hazard, 3 is high hazard

#### **SECTION 4 — FIRST AID MEASURES**

Call a physician and seek medical attention for further treatment, observation, and support after first aid. Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

#### **SECTION 5 — FIRE FIGHTING MEASURES**

Class IB flammable liquid.	NFPA CODE
Flash point: 16 °C Flammable limits: Lower: 2.5% Upper: 12% Autoignition Temperature: 460 °C	H-1
When heated to decomposition, emits acrid smoke and fumes.	F-3
Fire Fighting Instructions: Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and	R-0
SCBA with full facepiece operated in positive pressure mode.	

#### **SECTION 6 — ACCIDENTAL RELEASE MEASURES**

Restrict unprotected personnel from the area. Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

#### **SECTION 7 — HANDLING AND STORAGE**

Flinn Suggested Chemical Storage Pattern: Organic #2. Store with alcohols, glycols, amines, and amides. Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor can. Store in a cool, dry place. Use and dispense in a hood. Avoid prolonged storage (see section 10).

#### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and a chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire). Exposure guidelines: PEL 400 ppm, STEL 500 ppm (OSHA, ACGIH)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES** 

Clear, colorless liquid with a distinctive odor like rubbing alcohol.

Solubility: Soluble in water, alcohol, and ether.

Formula weight: 60,000

Formula weight: 60.095

Boiling point: 83 °C Melting point: -889 °C Specific gravity: 0.8 Vapor density: 2

Vapor pressure: 33 mmHg

#### **SECTION 10 — STABILITY AND REACTIVITY**

Avoid contact with strong oxidizers, acetaldehyde, chlorine, ethylene oxide, acids, and isocyanates.

Shelf life: Poor. Organic peroxides may develop if exposed to light and air, which can result in explosions, especially when distilled. Avoid prolonged storage.

#### **SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: Severe eye irritant, nausea, headache, vomiting.

Chronic effects: N.A.

Target organs: Nerves, kidneys.

ORL-RAT LD<sub>50</sub>: 5045 mg/kg

IHL-RAT LC<sub>50</sub>: N.A.

SKN-RBT LD<sub>50</sub>: 12800 mg/kg

N.A. = Not available, not all health aspects of this substance have been fully investigated.

#### **SECTION 12 — ECOLOGICAL INFORMATION**

Data not yet available.

#### SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #18a is one option.

#### **SECTION 14 — TRANSPORT INFORMATION**

Shipping name: Isopropyl alcohol Hazard class: 3, Flammable liquid

UN number: UN1219 N/A = Not applicable

#### SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (200-661-7), RCRA code D001.

#### **SECTION 16 — OTHER INFORMATION**

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## Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.