

MATERIAL SAFETY DATA SHEET

99% Isopropyl Alcohol

Date: 6/1/2008
MSDS Number: IPA0001
Version: 1.0

SECTION 1 Product and Company Identification

This product is sold in containers of volumes ranging from 55 gallon drum, 5 gallon pail, 1 gallon bottle and 32 ounce bottle. This MSDS has been developed to address safety topics for any individual handling, using and/or is physically nearby said product. This product is for commercial use only and only for the uses stated on containers.

Trade name: Isopropyl Alcohol
Synonyms: Isopropyl Alcohol, Dimethyl carbinol, Isopropanol
Company: **INX Products LLC**
4030 Kidron Road, Suite 14
Lakeland, FL 33811
Emergency Telephone: 1-888-646-9830

SECTION 2 Hazards Identification

Emergency Overview

Danger

Highly flammable.

State of matter

Liquid colorless

Odor

Aromatic

Potential environmental effects

Environmental precautions

Should not be released into the environment. Prevent further leakage or spillage if safe to do so.

Potential health effects

Acute effects

Eyes Causes eye irritation.

Skin Prolonged or repeated contact may dry skin and cause irritation.

Inhalation May cause respiratory tract irritation.

Ingestion Aspiration hazard if swallowed - can enter lungs and cause damage.

SECTION 3 Composition/Information on Ingredients

Components	CAS-No.	Weight %
Isopropyl alcohol; isopropanol 99%	67-63-0	100.00

SECTION 4 First Aid Measures

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before re-use. If skin irritation persists, call a physician.

Inhalation Move to fresh air in case of accidental inhalation of vapors. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

Ingestion If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

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SECTION 5 Fire-Fighting Measures

Flammability

Flash point

12 °C closed cup 18 °C open cup

Autoignition Temperature

398.89 °C

Explosion limits

Lower explosion limit: 2 %(V)

Upper explosion limit: 12 %(V)

Fire/explosion Flash back possible over considerable distance.

Hazardous combustion products

Carbon oxides

Suitable extinguishing media

Water spray

Alcohol-resistant foam

Dry chemical

Carbon dioxide (CO₂)

Unsuitable extinguishing media

No information available.

Protection measures and instructions

Wear self-contained breathing apparatus and protective suit.

Further information

Cool containers / tanks with water spray

SECTION 6 Accidental release measures

Personal precautions Keep people away from and upwind of spill/leak. Remove all sources of ignition. Do not breathe vapors or spray mist.

Environmental precautions

Should not be released into the environment. Prevent further leakage or spillage if safe to do so.

Methods for cleanup

Soak up with inert absorbent material and dispose of as hazardous waste.

Exposure controls / personal protection: see section 8

SECTION 7 Handling and Storage

Safe handling advice

Provide sufficient air exchange and/or exhaust in work rooms. Wear personal protective equipment. Take precautionary measures against static discharge. Ensure all equipment is electrically grounded before beginning transfer operations.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition. Use explosion-proof equipment.

Storage

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

SECTION 8 Exposure Controls / Personal protection

Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Eyes

Safety glasses with side-shields

Skin

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Protective suit Safety shoes

Inhalation

In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Hygiene measures Wash hands before breaks and immediately after handling the product.

Protective measures Wear suitable protective equipment.

Exposure Guidelines

Components Exposure limit(s)

ISOPROPYL ALCOHOL

US. ACGIH Threshold Limit Values time weighted average 200 ppm

US. ACGIH Threshold Limit Values Short term exposure limit 400 ppm

US. NIOSH: Pocket Guide to Chemical Hazards Recommended exposure limit (REL): 400 ppm (980 mg/m³)

US. NIOSH: Pocket Guide to Chemical Hazards Short term exposure limit 500 ppm (1,225 mg/m³)

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Permissible exposure limit 400 ppm (980 mg/m³)

US. OSHA Table Z-1-A (29 CFR 1910.1000) time weighted average 400 ppm (980 mg/m³)

US. OSHA Table Z-1-A (29 CFR 1910.1000) Short term exposure limit 500 ppm (1,225 mg/m³)

US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants Time Weighted Average (TWA) Permissible Exposure Limit (PEL): 400 ppm (980 mg/m³)

US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants Short term exposure limit 500 ppm (1,225 mg/m³)

PEL= Permissible Exposure Limits TWA= Time Weighted Average (8 hr.)

TLV= Threshold Limit Value STEL= Short Term Exposure Limit (15 min.)

EL= Excursion Limit WEEL= Workplace Environmental Exposure Level

SECTION 9 Physical and Chemical Properties

State of matter

liquid

Color

colorless

Odor

aromatic

Form

liquid

Boiling point/boiling range

82.22 °C

Flash point

12 °C closed cup 18 °C open cup

Lower explosion limit

2 %(V)

Upper explosion limit

12 %(V)

Vapor pressure

43.996 hPa at 20 °C

Solubility

completely soluble

Viscosity

0.1 mm²/s

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Viscosity, dynamic

2.4 m Pa.s

Melting point/range

-88.5 °C

Density

0.785 g/cm³

pH 7

SECTION 10 Stability and Reactivity

Conditions to avoid

Heat, flames and sparks.

Hazardous decomposition products

Carbon oxides

Incompatible products

Strong oxidizing agents

Incompatible with acids.

Halogenated compounds

Hazardous reactions

Hazardous polymerisation does not occur.

SECTION 11 Toxicological Information

Acute oral toxicity LD50 rat: 5,045 mg/kg; literature value

LD50 rabbit: 6,410 mg/kg; literature value

Acute inhalation toxicity

LC50 rat: 16,000 mg/l; ; 8 h; literature value

Acute dermal toxicity LD50 rabbit: 12,800 mg/kg; literature value

Skin irritation rabbit: Mild skin irritation; literature value

Eye irritation rabbit: Moderate eye irritation; literature value; Causes eye irritation.

SECTION 12 Ecological Information

Biodegradability Readily biodegradable.

Ecotoxicity effects

Toxicity to fish LC50 Pimephales promelas: > 6,000 mg/l; 96 h; (literature value)

SECTION 13 Disposal Considerations

Waste Classification US. EPA Resource Conservation and Recovery Act: (RCRA) D List of Characteristic Hazardous Wastes (40 CFR 261.21-24): D001

Waste from residues / unused products

In accordance with local and national regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. The product should not be allowed to enter drains, water courses or the soil.

Uncleaned empty packaging

Do not burn, or use a cutting torch on, the empty drum., Triple rinse containers., Can be offered for recycling, re-conditioning or puncture.

Handling and storage: See chapter 7

Exposure controls / personal protection: See chapter 8

SECTION 14 Transport Information

DOT/49CFR UN 1219 Isopropanol, 3, II

ADR UN 1219 Isopropanol, 3, II

RID UN 1219 ISOPROPANOL, 3, II

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ADNR UN 1219 ISOPROPANOL, 3, II
IMDG UN 1219 ISOPROPANOL, 3, II; EmS F-E, S-D
ICAO/IATA UN 1219 Isopropanol, 3, II

SECTION 15 Regulatory Information

U.S. Federal Classifications:

OSHA Hazards Flammable Liquid, Mild eye irritant
SARA 311/312 Fire Hazard, Acute Health Hazard

U.S. Regulated Ingredients:

Hazard information reporting

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

Components CAS-No.

Propan-2-ol **67-63-0**

US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

Components CAS-No.

Propan-2-ol **67-63-0**

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

Components CAS-No.

Propan-2-ol **67-63-0**

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

Components CAS-No.

Propan-2-ol **67-63-0**

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

Components CAS-No.

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Health

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)

Components CAS-No.

Not listed

Inventories

EU list of existing chemical substances All chemical constituents are listed in: EU list of existing chemical substances (See chapter 3)

US TSCA Inventory All chemical constituents are listed in: US TSCA Inventory (See chapter 3)

Australian Inv. of Chem. Substances AICS All chemical constituents are listed in: Australian Inv. of Chem. Substances AICS (See chapter 3)

Canadian Domestic Substances List DSL All chemical constituents are listed in: Canadian Domestic Substances List DSL (See chapter 3)

Jap. Inv. of Exist. & New Chemicals ENCS All chemical constituents are listed in: Jap. Inv. of Exist. & New Chemicals ENCS (See chapter 3)

Korean Exist. Chemicals List ECL All chemical constituents are listed in: Korean Exist. Chemicals List ECL (See chapter 3)

Philippines Inv. of Chem. Subst. PICCS All chemical constituents are listed in: Philippines Inv. of Chem. Subst. PICCS (See chapter 3)

Inv. of Exist. Chem. Substances in China All chemical constituents are listed in: Inv. of Exist. Chem. Substances in China (See chapter 3)

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Other international regulations

WHMIS Classification B2: Flammable Liquid
D2B: Toxic Material Causing Other Toxic Effects

SECTION 16 Other Information

Hazard Ratings

Health Flammability Reactivity Hazard

HMIS 1 3 0

NFPA 1 3 0

All reasonable efforts were exercised to compile this MSDS in accordance with ISO 11014 and ANSIZ400.1.1993. The MSDS provides information regarding the health, safety and environmental hazards, at the date of issue, to facilitate the safe receipt, use and handling of the product in the workplace. Since Sasol and its subsidiaries cannot anticipate or control all conditions under which the product may be handled, used and received in the workplace, it remains the obligation of each user, receiver or handler to, prior to usage, review this MSDS in the context within which the product will be received, handled or used in the workplace. The user, handler or receiver must ensure that the necessary mitigating measures are in place as regards health and safety. This does not substitute the need or requirement for any relevant risk assessments to be conducted. It further remains the responsibility of the receiver, handler or user to communicate such information to all relevant parties that may be involved in the receipt, use or handling of the product.