

SAFETY DATA SHEETVersion 1.0
Effective Date: 05/31/15**1. PRODUCT AND COMPANY IDENTIFICATION****Product Name:** ISOPROPANOL 99% TECH**Description:** Isopropyl Alcohol (IPA)**Product Code:** 1489**Suggested Use:** Solvent**Restrictions on Use:** N/A**Supplier:** Norman, Fox & Co.

14970 Don Julian

City of Industry, CA 91746

Telephone: 1-323-973-4900 or 1-800-632-1777**Fax:** 1-323-973-4874**Emergency Phone:** CHEMTREC 1-800-424-9300
International 1-703-527-3887**2. HAZARDS IDENTIFICATION****Classification****GHS Classification:** Flammable Liquid (Category 3)
Serious Eye Irritation (Category 2A)
STOT-SE Narcotic Effects (Category 3)**GHS Label Elements****Pictogram:****Signal Word:** Danger**Hazard Statements:** H225: Highly flammable liquid and vapor
H319: Causes serious eye irritation
H336: May cause drowsiness or dizziness**Precautionary Statements:** P210: Keep away from heat/sparks/open flames/hot surfaces. – No Smoking.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting/equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P261: Avoid breathing fumes, mist, vapors, or spray.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P370+P378: In case of fire: Use dry chemical, foam, carbon dioxide, water spray/fog to extinguish.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P501: Dispose of contents and container in accordance with all local, regional, national, and international regulations.

HMIS Classification:	Health Hazard:	1
	Flammability:	3
	Physical Hazards:	0
NFPA Rating:	Health Hazard:	1
	Fire:	3
	Reactivity Hazard:	0

Potential Health Effects

Inhalation:	Inhalation may cause respiratory tract irritation or central nervous system depression.
Skin:	Can cause irritation and drying of skin.
Eyes:	Contact can cause serious eye irritation or damage. Avoid contact.
Ingestion:	Harmful if swallowed. Possible aspiration hazard. Do not ingest.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS Number</u>	<u>Concentration</u>
Isopropanol	67-63-0	100%
Synonyms:	IPA; Isopropyl Alcohol; Propan-2-ol; 2-Propanol; Rubbing Alcohol	

4. FIRST AID MEASURES

If Inhaled:	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician if symptoms are experienced.
Skin Contact:	Flush skin with plenty of water. Remove contaminated clothing and shoes. If irritation persists, consult a physician.
Eye Contact:	Flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if able to do so. Immediately call a doctor or physician.
If Ingested:	Do not induce vomiting unless instructed to do so by a physician. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Flammability Overview:	Highly flammable liquid and vapor.
Flash Point:	12°C (54°F)
Extinguishing Media:	Use water-spray, alcohol-resistant foam, dry chemical, or carbon dioxide. Alcohol-resistant foam is recommended for large fires.

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Special Protective Equipment for Firefighters:	For large fires: Wear a self-contained breathing apparatus pressure demand (NIOSH approved or equivalent) and full protective gear. Fight fires from a safe distance or protected areas.
Special Hazards:	Sealed containers can explode in the heat of a fire. Vapors can travel a long distance to ignition sources and ignite.
Hazardous Combustion Products:	Carbon Oxides

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Use personal protective equipment. Avoid breathing vapors, mist, or gas. Always ensure adequate ventilation. No action should be taken involving any personal risk or without suitable training. Evacuate unnecessary and unprotected personnel to safe areas away from the spill.
Environmental Precautions:	If safe to do so, avoid the dispersal of spilled material and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution. Product may be harmful to the environment. Collect spillage.
Containment and Clean Up:	If safe to do so, stop the leak or spill and move containers away from the spill area. Prevent entry into sewers, waterways, and confined areas. Contain and collect spilled material with non-combustible, absorbent material. Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same physical hazards as the product. If assistance is needed call CHEMTREC or emergency services.

7. HANDLING AND STORAGE

Safe Handling:	Use personal protective equipment. Keep away from heat/sparks/open flames/hot surfaces. Be sure to ground containers and receiving equipment. Use explosion-proof and non-sparking equipment while handling. Take precautions against static discharge to avoid ignition. Avoid breathing vapors, mist, or gas. Always ensure adequate ventilation. No smoking, eating, or drinking when using this product. Handle in a manner consistent with good industrial hygiene practices.
Safe Storage:	Keep containers tightly closed in a cool, dry, well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store away from incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Component	CAS Number	Exposure Limit	Basis
Isopropanol	67-63-0	400 ppm	OSHA PEL
		200 ppm	ACGIH TLV (TWA)

Personal Protective Equipment

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Eye Protection:	Tightly fitting safety goggles or safety glasses should be sufficient. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH. Have eye-wash stations available where eye contact can occur.
Hand Protection:	Handle with chemical-resistant gloves. Gloves must be inspected prior to use. Dispose of contaminated gloves. Wash and dry hands after use.
Skin Protection:	Wear long sleeves, a chemical apron, or other appropriate chemical-resistant protective clothing to prevent skin contact. Safety showers should be located in the areas where skin contact can occur.
Respiratory Protection:	Always ensure adequate ventilation. Where risk assessment shows air-purifying respirators are appropriate, use a NIOSH-approved full-face respirator with appropriate cartridges. Respiratory protection must be provided in accordance with OSHA 29 CFR 1910.134.
General Controls:	Always ensure adequate ventilation and that working areas contain safety showers and eye wash stations. Handle material in accordance with good industrial hygiene and safety practices. Be sure to ground containers and receiving equipment. Use explosion-proof and non-sparking equipment while handling. Take precautions against static discharge to avoid ignition.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Appearance:	Colorless
Odor:	Characteristic, Ethanol-like
Odor Threshold:	N/A
pH:	N/A
Melting/Freezing Point:	-89.5°C (-129°F)
Initial Boiling Point:	82°C (180°F)
Flash Point:	12°C (54°F)
Evaporation Rate:	N/A
Flammability (solid, gas):	N/A
Flammability/Explosion Limits:	2-12 % vol
Vapor Pressure @ 38°C:	32 mmHg
Vapor Density:	2 (air=1)
Specific Gravity:	0.785
Density:	6.55 lbs/gal
Solubility in Water:	Soluble
Partition Coefficient:	N/A
Autoignition Temperature:	427°C (797°F)
Decomposition Temperature:	N/A
Viscosity:	<10 cPs

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable under recommended storage conditions.
Conditions and Materials to Avoid:	Avoid heat, fire, open flames, direct light, and ignition sources. Avoid strong oxidizing agents.

Hazardous Decomposition
Products:

In fire conditions: Carbon Oxides

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component	CAS Number	Test	Toxicity
Isopropanol	67-63-0	Oral LD50 (Rat)	5045 mg/kg
		Dermal LD50 (Rabbit)	>12000 mg/kg
		Inhalation LC50 (Rat)	30 mg/l (4hr)

Potential Health Effects

Inhalation: Inhalation may cause respiratory tract irritation or central nervous system depression.
 Skin: Can cause irritation and drying of skin.
 Eyes: Contact can cause serious eye irritation or damage. Avoid contact.
 Ingestion: Harmful if swallowed. Possible aspiration hazard. Do not ingest.

Signs and Symptoms of Exposure: Irritation
 Watery Eyes
 Drowsiness/Dizziness
 Light Headedness

Chronic Effects of Long-term Exposure: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

Acute Ecotoxicity

Component	CAS Number	Organism	Ecotoxicity
Isopropanol	67-63-0	Rasbora heteromorpha	96 hr LC50 > 4000 mg/l

Ecological Effects

Persistence and Degradability: No specific data available

Bioaccumulation Potential: Not expected to bioaccumulate.

Mobility in Soil: No specific data available.

Other Adverse Effects: Although not expected to be a significant threat to the environment, the product should be carefully disposed of. Prevent run-off to sewers, drains, and waterways.

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Disposal:	The generation of waste should be avoided or minimized wherever possible. Material should be disposed of in accordance with all local, state, and federal regulations. Regulations vary by region. Avoid release into the soil, sewers, drains, and other waterways.
Contaminated Packaging:	Waste packaging should be recycled or reused whenever possible. If recycling is not feasible, contaminated packaging should be disposed of in accordance with all local, state, and federal regulations. Regulations vary by region.

14. TRANSPORT INFORMATION**DOT Information**

Proper Shipping Name:	Isopropanol
UN Number:	UN1219
Hazard Class:	3, Flammable Liquid
Packing Group:	II

Reportable Quantity (RQ): N/A

Marine Pollutant: No

Note: Regulated for ground transportation in bulk and non-bulk containers.

15. REGULATORY INFORMATION**US Federal**

SARA 302 Components:	None Listed
SARA 311/312 Hazards:	Acute Health Hazard, Fire Hazard
SARA 313 Components:	Isopropanol (CAS 67-63-0)
TSCA Inventory:	All components listed or exempted.

European Union

EC Inventory: EINECS 2200-661-7

State Regulations

CA Prop 65: None Listed

16. OTHER INFORMATION

SDS Version:	1.0
Revision Date:	05/31/2015
Supersedes:	New to GHS

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The information contained in this document was carefully compiled and is believed to be accurate. The information represents the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. However, it does not represent any guarantee of the properties of the product. Norman, Fox & Co. shall not be held liable for any damages resulting from handling or from contact with the above product. It is the responsibility of the purchaser to determine the suitability of the product for their particular purposes. Nothing contained herein shall be construed to be a recommendation to use, or as a license to operate under, or to infringe any existing patents.

For product information or to re-order, call Norman, Fox & Co. at 323-973-4900.

