

SAFETY DATA SHEET

Isopropyl Acetate
Product ID: OR0904
Revised: 07-27-2016
Replaces: 10-22-2013

CHEMICAL DISTRIBUTION
SOLUTIONS

1. IDENTIFICATION

Product Identifier: Isopropyl Acetate
Other Identifiers: 1-Methylethyl Ethanoate; 2-Propyl Ethanoate; 2-Propyl Acetate; 2-Acetoxyp propane; Acetic Acid Isopropyl Ester; Acetic Acid, 1-Methylethyl Ester; Isopropyl Ethanoate; 1-Methylethyl Acetate
CAS Number: 108-21-4
Recommended Use: No data available.
Restrictions on Use: No data available.

Chemical Distribution Solutions
1125 Oak St. Ste. 303
(501) 978-1111

EMERGENCY RESPONSE NUMBERS:
24 Hour Emergency #: (800) 424-9300 CHEMTREC

2. HAZARD(S) IDENTIFICATION

GHS Classification(s): Flammable Liquid Category 2
Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2A
Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3

GHS Label Elements:

GHS Hazard Symbols:



Signal Word: Danger
Hazard Statements: Highly flammable liquid and vapour.
Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.

Precautionary Statements:

Prevention: Keep away from heat, sparks, open flames and hot surfaces. – No smoking.
Ground and bond container and receiving equipment.
Use explosion-proof electrical, ventilating, and lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust, gas, mist, vapors or spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a POISON CENTER or doctor if you feel unwell.
Specific treatment (see First Aid on SDS or on this label).
If skin irritation occurs: Get medical advice or attention.
If eye irritation persists: Get medical advice or attention.
Take off contaminated clothing and wash before reuse.
In case of fire: Use alcohol foam, carbon dioxide, dry chemical, water spray to extinguish.

Storage: Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store in a secure manner.

Disposal: Dispose of in accordance with local, regional and international regulations.

Hazards Not Otherwise Classified: May be harmful or fatal if swallowed and enters airways. Prolonged or repeated skin contact may cause drying, cracking, or irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances/Mixtures:

<u>Chemical or Common Name/Synonyms</u>	<u>CAS Number</u>	<u>% by Wt.</u>
Isopropyl Acetate	108-21-4	>= 99.5 %

Note: Any chemical identity and/or exact percentage not expressly stated is being withheld as a trade secret or is due to batch variation.

4. FIRST-AID MEASURES

Description of Necessary Measures:

Eye Contact: If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention. Remove contact lens if easy to do.

Skin Contact: If on skin: Flush skin with plenty of water while removing contaminated clothing and shoes. Do not reuse clothing or shoes until cleaned. If irritation develops or persists, get medical attention. Wash with soap and water. Discard footwear which cannot be decontaminated.

Inhalation: If inhaled: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

Ingestion: If swallowed: Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Most Important Symptoms/Effects, Acute and Delayed:

Eye Contact: Causes severe irritation.

Skin Contact: May cause mild irritation. Prolonged and repeated contact with skin can cause defatting and drying of the skin which may result in skin irritation and dermatitis. Contact may cause: burns.

Skin Absorption: No evidence of harmful effects based on available information.

Inhalation: Causes moderate irritation. Inhalation overexposure may lead to central nervous system depression producing effects such as: nausea. headache. dizziness. drowsiness. unconsciousness. narcotic effects. coma. Causes irritation of the: mucous membranes. May irritate: respiratory tract.

Ingestion: May cause moderate irritation. May cause: gastrointestinal irritation. nausea. vomiting. diarrhea. central nervous system depression. excitement. headache. dizziness. drowsiness. Advanced stages may cause: collapse. unconsciousness. coma. possible death due to respiratory failure.

Indication of Immediate Medical Attention and Special Treatment Needed: There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Water spray. Dry chemical. Carbon dioxide. Alcohol foam. Water may be ineffective but should be used to cool fire-exposed structures and vessels.

Specific Hazards Arising from the Chemical:

Fire and Explosion Hazards: HIGHLY FLAMMABLE LIQUID. Vapors are heavier than air. Vapors may settle in low or confined areas, or travel long distances along the ground or surface to an ignition source where they may ignite, flashback, or explode. Keep away from heat, sparks, flames or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment). **PROCESS HAZARD:** Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into hot equipment under a vacuum, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated-temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions. This material may produce a floating fire hazard.

Hazardous Combustion Products: Carbon dioxide. Carbon monoxide.

Special Protective Equipment and Precautions for Fire-Fighters: Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers and disperse vapors. If container is not properly cooled, it can rupture in the heat of a fire. Avoid water accumulation. Product may reignite and burn on the water's surface.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, Emergency Procedures: HIGHLY FLAMMABLE LIQUID. Eliminate all sources of ignition. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit.

Methods and Materials for Containment and Clean Up: Use non-sparking tools and equipment. Shut off source of leak if safe to do so. If fire potential exists, blanket spill with alcohol-type aqueous film-forming foam or use water spray to disperse vapors. Contain spill, place into drums for proper disposal. Soak up residue with non-flammable absorbent material. Place in non-leaking containers for immediate disposal. Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. Empty containers retain product residue (vapor, dust, or liquid) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other source of ignition. They may explode and cause injury or death. Avoid dust or mist formation. Launder contaminated clothing before reuse. Air-dry contaminated clothing in a well ventilated area before laundering. Always open containers slowly to allow any excess pressure to vent. Ground all equipment and containers before opening to prevent accumulation of static charge. Ground lines and equipment used during transfer to reduce the possibility of static spark-initiated fire or explosion. Use non-sparking tools. Avoid splash filling.

Conditions for Safe Storage, Including any Incompatibilities: HIGHLY FLAMMABLE LIQUID. Store in a cool, well-ventilated area away from all sources of ignition and out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or

Isopropyl Acetate
Product ID: OR0904

mislabeled containers. Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer containers and equipment.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Guidelines:

Component	Limits
Isopropyl Acetate	250 ppm TWA; 950 mg/m ³ TWA

ACGIH Exposure Guidelines:

Component	Limits
Isopropyl Acetate	200 ppm STEL; 100 ppm TWA

Engineering Controls: General room ventilation is required. Local exhaust ventilation, process enclosures or other engineering controls may be needed to maintain airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. Avoid creating dust or mist. Maintain adequate ventilation. Do not use in closed or confined spaces. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

Individual Protection Measures:

Eye/Face Protection: Wear chemical safety goggles while handling this product. Wear additional eye protection such as a face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material.

Skin Protection: Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Chemical-resistant. Butyl rubber.

Respiratory Protection: Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH-Approved air-purifying respirator with: Organic vapor cartridge. NIOSH-Approved Supplied Air Respirator (SAR). NIOSH-Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

Other Protective Equipment: Eye-wash station. Safety shower. Rubber apron. Rubber boots. Protective clothing.

General Hygiene Conditions: Wash with soap and water before meal times and at the end of each work shift. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical, especially before eating or smoking. Handle in accordance with good industrial hygiene and safety practice. Food, beverages, and tobacco products should not be carried, stored or consumed where this material is in use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.

Color: Colorless.

Odor: Sweet odor. Fruity odor.

Odor Threshold: < 2.7 ppm

pH: N.A.

Freezing Point (deg. F): < -73

Melting Point (deg. F): N.D.

Initial Boiling Point or Boiling Range: 185 - 191 °F

Flash Point: 35 °F

Flash Point Method: TCC.

Evaporation Rate (nBuAc = 1): 5

Flammability (solid, gas): N.D.

Lower Explosion Limit: 1.8% (V) 100 Deg. F

Upper Explosion Limit: 8% (V)

Isopropyl Acetate
Product ID: OR0904

Vapor Pressure (mm Hg): 47 @20C
Vapor Density (air=1): 3.5
Specific Gravity or Relative Density: 0.869-0.872 @20C
Solubility in Water: ~3.0% @20C
Partition Coefficient (n-octanol/water): 1.03
Autoignition Temperature: 860-894 Deg. F. (460-479 Deg. C.)
Decomposition Temperature: N.D.
Viscosity: 0.60 mPa.s (20C)
% Volatile (wt%): 100%
VOC (wt%): 100%
VOC (lbs/gal): 7.24-7.26
Fire Point: N.D.

10. STABILITY AND REACTIVITY

Reactivity: No data available.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur under normal conditions. Vapors may form explosive mixture with air.

Conditions to Avoid: Avoid contact with heat, sparks, electric arcs, other hot surfaces, and open flames.

Incompatible Materials: Oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products: Carbon dioxide. Carbon monoxide. May release flammable gases.

11. TOXICOLOGICAL INFORMATION

Routes of Exposure: Eyes. Ingestion. Inhalation. Skin.

Symptoms/Effects: Acute, Delayed and Chronic:

Eye Contact: Causes severe irritation.

Skin Contact: May cause mild irritation. Prolonged and repeated contact with skin can cause defatting and drying of the skin which may result in skin irritation and dermatitis. Contact may cause: burns.

Skin Absorption: No evidence of harmful effects based on available information.

Inhalation: Causes moderate irritation. Inhalation overexposure may lead to central nervous system depression producing effects such as: nausea. headache. dizziness. drowsiness. unconsciousness. narcotic effects. coma. Causes irritation of the: mucous membranes. May irritate: respiratory tract.

Ingestion: May cause moderate irritation. May cause: gastrointestinal irritation. nausea. vomiting. diarrhea. central nervous system depression. excitement. headache. dizziness. drowsiness. Advanced stages may cause: collapse. unconsciousness. coma. possible death due to respiratory failure.

Numerical Measures of Toxicity:

<u>Component</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
Isopropyl Acetate	Rat: 3000 mg/kg	Rabbit: > 17400 mg/kg	8H Rat: 50600 mg/m3

Cancer Information:

This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

Medical Conditions Aggravated by Exposure to Product: Respiratory system disorders. Eye disorders. Skin disorders. Central nervous system disorders.

Other: Repeated overexposure may cause liver damage. Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: LC0: Leuciscus idus melanotus – 260 mg/L (48 hr)
LC50: Leuciscus idus melanotus – 265 mg/L (48 hr)
LC50: Golden Orfe – 265-360 mg/L (48 hr)
LC50: Daphnia Magna - > 1000 mg/L
LC50: Daphnid – 1260 mg/L (48 hr)
NOEC: Daphnid – 4150 mg/L (24 hr)
ErC50: Alga – 370 mg/L (96 hr)

Chemical Fate Information: LogPow: 1.03
76% Readily Biodegradability (Closed Bottle Test) – 20 days
Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria.

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: D001

Disposal Method: Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. For unused and uncontaminated product, the preferred options include sending to a licensed, permitted: incinerator or other thermal destruction device. waste water treatment system. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

DOT (Department of Transportation):

Identification Number: UN1220
Proper Shipping Name: Isopropyl Acetate
Hazard Class: 3
Packing Group: II
Label Required: FLAMMABLE

15. REGULATORY INFORMATION

TSCA Inventory Status: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

SARA Title III Section 311/312 Category Hazards:

	<u>Immediate (Acute)</u>	<u>Delayed (Chronic)</u>	<u>Fire Hazard</u>	<u>Pressure Release</u>			<u>Reactive</u>		
	Yes	No	Yes	No			No		
Regulated Components:									
Component			CAS	CERCLA	SARA	SARA	U.S.	WI	Prop
			Number	RQ	EHS	313	HAP	HAP	65
No components found.									

***Prop 65 - May Contain the Following Trace Components:**
None known.

16. OTHER INFORMATION

Hazard Rating System

Health: 1
Flammability: 3

Isopropyl Acetate
Product ID: OR0904

Reactivity: 0
* = Chronic Health Hazard

NFPA Rating System

Health: 2
Flammability: 3
Reactivity: 0
Special Hazard: None

SDS Abbreviations

N.A. = Not Applicable
N.D. = Not Determined
HAP = Hazardous Air Pollutant
VOC = Volatile Organic Compound
C = Ceiling Limit
N.E./Not Estab. = Not Established

SDS Prepared by: JAK

Reason for Revision: New format.

Revised: 07-27-2016

Replaces: 10-22-2013

The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which Chemical Distribution Solutions assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.