

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 **Product identifier**
Product Name: Isopropanol alcohol
Chemical Formula: C₃H₈O
CAS-No: 67-63-0
Molecular Weight: 60.1 g/mol
Relevant identified uses of the substance or mixture and uses advised against
Identified uses: End product
Uses advised against: None known
Details of the supplier of the safety data sheet
Supplier
HENAN GP CHEMICALS CO.,LTD
RM1030.24TH FLOOR XIYUE CENTER,ZHENGZHONG CYBERPORT NO.33
JINSUO ROAD,ZHENGZHOU 450000,CHINA
Emergency telephone number:
+8615617978860

SECTION 2: Hazards identification

Emergency Overview

OSHA Hazards:

Flammable liquid, Target Organ Effect, Irritant

Target Organs

Gastrointestinal tract, Liver, Cardiovascular system, Kidney, Nerves.

GHS Classification

Flammable liquids (Category 2)

Skin irritation (Category 3)

Eye irritation (Category 2A)

Specific target organ toxicity –single exposure (Category 3)

NFPA:



2.1 GHS label items including precautionary statements:

Pictogram:



Signal word:

Danger

Hazard statement(s):

H225

Highly flammable liquid and vapour.

H316

Causes mild skin irritation.

H319

Causes serious eye irritation.

H336

May cause drowsiness or dizziness.

Precautionary statement(s)

P210

Keep away from heat, sparks, open flames, and hot surfaces. No smoking.

P261

keep container tightly closed.

P305+P351+P338

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

Supplemental Hazard Statements

None

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

General information:

Chemical name	Concentration	Additional identification
Isopropanol alcohol	100%	CAS-No.: 67-63-0 EC-No.: 200-661-7 Index-No.: 603-117-00-0

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

SECTION 4: First aid measures

General advice

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Description of first aid measures

Inhalation: Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as need.

Eye contact: Thoroughly flush eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Skin contact: Wash skin with soap and copious amounts of water. Seek medical attention.

Ingestion: Do Not induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with water. Seek medical attention. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

Central nervous system depression prolonged or repeated exposure can cause: Nausea, Headache, Vomiting, narcosis, Drowsiness, Overexposure may cause mild, reversible liver effects.

Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

Conditions of flammability:

Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.

Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions. –Carbon oxides.

Special protective equipment for firefighters:

Wear self-contained breathing apparatus (SCBA) for firefighting if necessary.

Further information:

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all source of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentration. Vapours can accumulate in low areas.

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:

Contain spillage, then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (See section 13), keep container closer.

Notification Procedures:

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

SECTION 7: Handling and storage:

Precautions for safe handling:

Avoid contact with skin and eyes. Avoid inhalation of vapours or mist. Keep away from sources of ignition – No smoking. Take measures to prevent the buildup of electrostatic charge.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Handle and store under inert gas. Hygroscopic.

SECTION 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits:

Components	Source	Type	Value	Note
Isopropanol	US(ACGIH) CN	STEL	400PPM No Standard	ACGIH Threshold Limit value CHINA
Isopropanol	US(ACGIH) CN	TWA	200PPM No Standard	ACGIH Threshold Limit value CHINA
Isopropanol	US(OSHA) CN	STEL	500ppm/1225mg/m ³ No Standard	USA.OSHA-TABLE Z-1 Limits for Air Contaminants 1910.1000 CHINA
Isopropanol	US(OSHA) CN	TWA	400ppm/980 mg/m ³ No Standard	USA.OSHA-TABLE Z-1 Limits for Air Contaminants 1910.1000 CHINA

Exposure controls

Appropriate engineering controls:

General room or local exhaust ventilation is usually required to meet exposure limit(s). Electrical equipment should be grounded and conform to applicable electrical code.

Individual protection measures, such as personal protective equipment:

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).

Hand protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye/face protection:

Wear a face shield when working with molten material. Wear safety glasses with side shields (or goggles).

Skin protection & body protection:

Wear impervious, flame retardant, antistatic protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Environmental Controls:

No information.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Appearance	
Physical State:	Liquid
Color:	Colourless
Odor:	alcohol-like
Odor Threshold:	No data available.
pH:	No data available.
Melting Point:	-89.5 °C (-129.1°F)
Boiling Point:	82 °C (180°F)
Flash Point:	12 °C (53.6°F) (Closed Cup)
Evaporation Rate:	3.0.
Flammability (solid, gas):	No data available
Flammability Limit - Upper (%)-:	12.7%(V)
Flammability Limit - Lower (%)-:	2%(V)
Vapor pressure:	43.2 hPa(32.4mmHg) at 20°C (68°F)
Vapor density (air=1):	No data available
Specific Gravity:	0.785g/cm ³ at 25°C (77°F)
Solubility(ies):	
Solubility in Water:	Completely soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	log Pow: 0.05.
Auto-ignition Temperature:	425°C (797°F)
Decomposition Temperature:	No data available.
Dynamic Viscosity:	No data available.
Kinematic viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.
Molecular Weight :	60.1g/mol

SECTION 10: Stability and reactivity**Reactivity:**

None known.

Chemical stability:

No data available.

Possibility of hazardous reactions:

Vapors may form explosive mixture with air.

Conditions to avoid:

Heat, flames, and sparks. Extreme temperatures and direct sunlight

Incompatible materials:

Oxidizing agents, Acid anhydrides, Aluminum, Halogenated compounds, Acids.

Hazardous decomposition products:

Other decomposition products formed under fire conditions. – Carbon oxides

Other decomposition products – no data available

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation, Ingestion, Skin contact, Eye contact:

Information on toxicological effects

Acute Toxicity

Oral LD50

LD50 Oral –rat- 5.045mg/kg

Dermal LD50 (rabbit)

12800mg/kg

Inhalation LC50

LC50 inhalation –rat- 8h – 16000ppm

Specific target organ toxicity – single exposure (Globally Harmonized System)

Inhalation – May cause drowsiness or dizziness, - Central Nervous System

Carcinogenicity

IRAC: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IRAC.

ACGIH: This product is or contains a component that is not classifiable as to its carcinogenicity based on its ACGIH.

NTP: This product is or contains a component that is not classifiable as to its carcinogenicity based on its NTP

OSHA: This product is or contains a component that is not classifiable as to its carcinogenicity based on its OSHA.

Other Hazards:

Eyes:

Causes serious eye irritation.

Ingestion:

May be harmful if swallowed.

Inhalation:

May be harmful if inhaled. May cause respiratory tract irritation. Vapours may cause drowsiness and dizziness.

Skin:

May be harmful if absorbed through skin. Causes skin irritation.

Signs and Symptoms of Exposure

Central nervous system depression, Prolonger or repeated exposure can cause: Nausea, Headache, Vomiting, narcosis, drowsiness, Overexposure may cause mild, reversible liver effects.

SECTION 12: Ecological information

Toxicity

Acute toxicity

Fish

LC50 -96h- fish -9640mg/L

Daphnia and other aquatic invertebrates.

EC50 – Daphnia magna (Water flea) – 5102 mg/l -24h

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil:

No data available

Results of PBT and vPvB assessment:

No data available

Other adverse effects:

No data available.

SECTION 13: Disposal considerations

Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

Important Note:

Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

DOT (US)

UN-number: 1219 Class: 3 Packing Group:II

Proper shipping name: ISOPROPANOL

Marine pollutant: No

IMDG

UN-number: 1219 Class: 3 Packing Group:II EMS-N0: F-E, S-D

Proper shipping name: ISOPROPANOL

Marine pollutant: No

IATA

UN-number: 1219 Class: 3 Packing Group:II
Proper shipping name: ISOPROPANOL

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

OSHA Hazards.

Flammable liquid, irritant.

All ingredients are on the following inventories or are exempted from listing

SECTION 16: Other information

HMIS® Hazard Ratings: Health hazard - 2, Fire hazard - 3, Reactivity - 0

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

Revision Information:	New MSDS
Key literature references and sources for data:	No data available.
Training information:	No data available.
Issue date:	01/25/2018
MSDS No.:	
Disclaimer:	

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.