	MATERIAL SAFETY DATA SHEET	MSDS No.	B-02
	ISOPROPYL ALCOHOL (IPA)	Effective From	16.03.2021

MATERIAL SAFETY DATA SHEET

SECTION # 1: PRODUCT INFORMATION

Trade Name Isopropyl Alcohol/ IPA
Seller Bloomchemag BV
Address Sint - Antoniusstraat 16 b1, B-2400 Mol, Belgium.
Phone No. +91 72919 74050/ 72919 74484/ 98713 71594
E-mail info@bloomchemag.com

Other Information Relevant identified uses of the substance or mixture and uses advised against: Manufacture of acetone and derivatives; manufacture of glycerol and isopropyl acetate; solvents for aromatic and other oils, alkaloids, glue, resins; possible solvents for cellulose derivatives; coating solvent; anti-freeze agent for liquid fuel; enamel; extract processing; dehydrating agent; preservatives; lotion; denaturant.

SECTION # 2: HAZARD IDENTIFICATION

GHS Classification: FLAMMABLE LIQUIDS, Category 2, H225
 SERIOUS EYE DAMAGE/IRRITATION, Category 2, H319
 SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE), Category 3, H336

GHS label elements

Symbol(s)



Signal words: Danger


Disposal:

P501 - Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national regulations

SECTION # 3: COMPOSITION OF MIXTURE**3.1 Substances / Mixtures**

General information:

Chemical name	Concentration	Additional identification
Isopropanol, Isopropyl alcohol, Propan-2-ol	99.0%	CAS-No.: 67-63-0 EC-No.: 200-661-7 EINECS No: 200-611-7

	MATERIAL SAFETY DATA SHEET	MSDS No.	B-02
	ISOPROPYL ALCOHOL (IPA)	Effective From	16.03.2020

Hazard Class (category)	Flam. Liq.-2; Eye Irrit-2; STOT SE.-3
Hazard Statement	H225, H319, H336

SECTION # 4: FIRST AID MEASURES

General advice

Keep victim calm. Obtain medical treatment immediately.

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:

Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision. Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance. Other signs and symptoms of central nervous system (CNS) depression may include headache, nausea, and lack of coordination. Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing.

Indication of any immediate medical attention and special treatment needed

Causes central nervous system depression. Call a doctor or poison control center for guidance.

SECTION # 5: FIRE FIGHTING MEASURE

Clear fire area of all non-emergency personnel.

Specific Hazards:

Carbon monoxide may be evolved if incomplete combustion occurs. The vapor is heavier than air, spreads along the ground and distant ignition is possible.

Extinguishing Media:

Alcohol-resistant foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not discharge extinguishing waters into the aquatic environment.

Unsuitable Extinguishing Media: Do not use water in a jet.

Protective Equipment for Fire fighters: Wear full protective clothing and self-contained breathing apparatus.

Other Advice: Keep adjacent containers cool by spraying with water.

SECTION # 6: ACCIDENTAL RELEASE MEASURES

Observe all relevant local and international regulations.

Personal Precautions, Protective Equipment and Emergency Procedures:

Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. For guidance on disposal of spilled material. see Chapter 13 of this Material Safety Data Sheet.

Environmental Precautions:


Shut off leaks, if possible, without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and firefighting water) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapor or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment.

Methods and material for containment and clean up:

For small liquid spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

Additional Advice:

Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. Vapor may form an explosive mixture with air.

	MATERIAL SAFETY DATA SHEET	MSDS No.	B-02
	ISOPROPYL ALCOHOL (IPA)	Effective From	16.03.2020

SECTION # 7: HANDLING AND STORAGE

General Precautions:

Avoid breathing vapors or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. On guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

Precautions for safe Handling:

Electrostatic charges may be generated during pumping.

Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 10 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations. Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. Handling Temperature: Ambient.

Conditions for safe Storage:

Keep away from aerosols, flammables, oxidizing agents, corrosives and from products harmful or toxic to man or to the environment. Must be stored in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Storage Temperature: Ambient.

Product Transfer:

Keep containers closed when not in use. Do not use compressed air for filling, discharging or handling.

Recommended Materials:

For containers, or container linings use carbon steel, stainless steel. For container paints, use epoxy paint, zinc silicate paint.

Unsuitable Materials: Aluminum if > 50 °C. Most plastics. Neoprene rubber. Rubbers.

Container Advice: Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers.


Other Advice: Ensure that all local regulations regarding handling and storage facilities are followed.

SECTION # 8: EXPOSURE CONTROL / PERSONAL PROTECTION

If the American Conference of Governmental Industrial Hygienists (ACGIH) value is provided on this document, it is provided for information only.

Occupational exposure limits:

Components	Source	Type	Value (in ppm)	Notation
Isopropanol	ACGIH	TWA	200	
		STEL	400	

	MATERIAL SAFETY DATA SHEET	MSDS No.	B-02
	ISOPROPYL ALCOHOL (IPA)	Effective From	16.03.2020

Biological Exposure Index (BEI)- See reference for full details

Material	Determinant	Sampling Time	BEI	Reference
Isopropanol	Acetone in Urine	End of shift at end of work week	40 mg/l	ACGIH BEL (2008)

Appropriate Engineering Controls:

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits. Eye washes and showers for emergency use.

Individual protection Measures: Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Respiratory protection: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for organic gases and vapours [boiling point >65 °C (149 °F)] meeting EN14387. Where air-filtering respirators are unsuitable (e.g., airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.

Eye protection: Chemical splash goggles (chemical monogoggles). Monogoggles (EN166)

Body protection: Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.

Hand protection: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739, AS/NZS:2161) made from the following materials may provide suitable chemical protection: Longer term protection: Natural rubber. Butyl rubber. Incidental contact/Splash protection: Neoprene rubber. Viton. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.



MATERIAL SAFETY DATA SHEET

MSDS No.

B-02

ISOPROPYL ALCOHOL (IPA)

Effective
From

16.03.2020

SECTION # 9: PHYSICAL AND CHEMICAL PROPERTIES / CHARACTERISTICS**9.1 Information on basic physical and chemical properties**

Appearance

Physical State:

Liquid

Color:

Colorless

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/cm³ 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.



MATERIAL SAFETY DATA SHEET

MSDS No.

B-02

ISOPROPYL ALCOHOL (IPA)

Effective
From

16.03.2020

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:



MATERIAL SAFETY DATA SHEET

MSDS No.

B-02

ISOPROPYL ALCOHOL (IPA)

Effective
From

16.03.2020

Causes serious eye irritation.

Ingestion:

May be harmful if swallowed.

Inhalation:

May be harmful if inhaled. May cause respiratory tract irritation. Vapors 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.

	MATERIAL SAFETY DATA SHEET	MSDS No.	B-02
	ISOPROPYL ALCOHOL (IPA)	Effective From	16.03.2020

SECTION # 13: DISPOSAL INFORMATION

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: REGULATION 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

	MATERIAL SAFETY DATA SHEET	MSDS No.	B-02
	ISOPROPYL ALCOHOL (IPA)	Effective From	16.03.2020

SECTION # 16: INTENDED USE

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.

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

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