



SAFETY DATA SHEET

ISOBUTYL ACETATE

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: ISOBUTYL ACETATE

Recommended use: Chemical for industry.

Manufacturer/Supplier: MODERN CHEMICAL CO.,LTD.
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2. HAZARDS IDENTIFICATION

Label elements

Pictogram



Signal word

Danger

Hazard statement(s):

1.) Highly flammable liquid and vapor may causes skin and eye irritation.

Precautionary statement(s):

1.) Keep containers in a well-ventilated place, keep away from sources of ignition - No smoking, and avoid contacting with eyes.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonym: 2-Methyl-1-propyl acetate; Acetate acid, 2- methylpropyl ester; Acetic acid, isobutyl ester isobutyl ester; Beta-methylpropyl ethanoate; 2 – Methylpropyl acetate

Ingredients	% (w/w)	CAS NO.
ISOBUTYL ACETATE	100	110-19-0



4. FIRST AID MEASURES

General advice:

No data available.

Inhalation:

Administered oxygen if patient is unconscious. Remove patient to fresh air, or remove the pollutant away at once. If patient has stopped breathing administrate the ARTF respiratory. If patient is in cardiac arrest administrate CPR, continue life supporting measures until medical assistant arrive. Get medical attention immediately.

Skin contact:

If this product contacts the skin, flush warm water for at last 20 minutes.

If this product penetrates the clothing, promptly remove the clothing and wash the skin with soap & water. If irritation persists after washing, get medical attention. Launder clothing and accessory before reuse.

Eye contact:

If this product contacts the eyes, lifting the lower and upper lids and flush eyes continuously with warm water for at last 20 minutes. Avoid contaminating to another eye during eye washing. Get medical attention immediately.

Ingestion:

Not allowed to feed the any food or water if patience is unconscious. Rinse the patience's month with water and do not induce vomiting. Feed the patient 240-300 ml of water. Provide the water for patient's month rinsing after patient vomited. If patient has stopped breathing administrate the ARTF respiratory. If patient is in cardiac arrest administrate CPR, continue life supporting measures until medical assistant arrive. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Carbon dioxide, dry chemical powder or firefighting foam. Do not use water!

Unsuitable Extinguishing Media:

Do not use water.

Specific hazards arising from Chemicals:

No data available.



Special protective equipment for fire-fighters:

Use government approved SCBA and full protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Keep unnecessary and unprotected personnel from entering. Make sure that decontamination people had been trained. Put on appropriate personal protective equipment.

Environmental precautions: Ventilate area. Wear appropriate respirator when ventilation is inadequate. Eliminate all ignition sources. Inform the relevant authorities involve the Council of Labor Affairs and Environmental Protection Administration.

Methods and Material for Containment and Clean Up:

Do not allow material to enter sewers or ground. Stop or control the spill, if this can be done without undue risk. Absorb on vermiculite or similar material.

Spill Release (small): Absorb on vermiculite or similar material, isolate discharged material for proper disposal, then wash the contamination area by water.

Spill Release (large): Call the fire brigade and emergency response center for help.

7. HANDLING AND STORAGE

Precautions for Safe Handling & Product Transfer:

Use approval container with NO SMOKING symbol for storing. Grounding or bonding of containers is recommended before material transfer. Activities such as sanding, burning off etc. of paint films may generate dust and/or fumes hazardous to the skin and lungs. Work in well ventilated areas. Use local exhaust ventilation and personal skin and respiratory protective equipment as appropriate. Container should have the clear label and keep tight.

Conditions for Safe Storage & Unsuitable Materials:

Store in cool, dry and well-ventilated place. Store only with compatible chemicals. Make sure that ventilation system and electrical equipment without the spark occur in the store place. Contain in the appropriated container with clear label. Keep tightly closed. Use the appropriate container, tank, or building for storage.



Storage area control and manager. Storage area should have extinguisher. Followed the regulation for store. The tank should be set on the ground with dike around. Use the explosion proof refrigerator for store.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: TWA 150 ppm

Appropriate Engineering Controls: It is recommended that work be done in an adequately ventilated area (i.e., ventilation sufficient to maintain concentrations below one half of the PEL and other relevant standards). Isolated the workplace is recommended when local exhaust ventilation is not sufficient to control airborne contamination.

Individual Protection Measures

Respiratory protection: The concentration below 1300 ppm: can use the mask with canister of organic solvent, the mask with air supplied hose, or circuit self-contained breathing apparatus.

Unknown condition: can use the mask with air supplied hose, or circuit self-contained breathing apparatus.

Escaping: can use the mask with canister of organic solvent or circuit self-contained breathing apparatus.

Hand protection: Protection gloves by 4H

Eye protection: Mask and glasses for chemical resistant

Skin and body protection: Protection suit and boots for chemical resistant

Hygiene measures: Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Appropriate techniques should be used to remove potentially contaminated clothing. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Keep the workplace clean.



9. PHYSICAL AND CHEMICAL PROPERTIES

Form, Color and Odor : liquid, colourless, fruit taste	Evaporation rate : 1.5
Melting Point : (-98.9) – (-98.6) °C	Specific gravity : 0.868 – 0.873 g/cm ³ at 20 °C
pH : N/A	Solubility in water : 0.67 g/L water 20 °C
Boiling point : 117.2 °C	Viscosity : N/A
Vapour pressure : 13 mmHg at 25 °C	Vapour density : 4
Lower explosive limits : 1.3 %Vol	Upper explosive limits : 10.5 %Vol
Auto-ignition temperature : 421°C	Flash Point : 18°C
Odour threshold : 0.36-3.6 ppm (detect), 0.51-7.2 ppm (perceive)	Flammability (solid, gas) : N/A
Decomposition temperature : N/A	Solubility in other solvents : N/A
n-octanol/water partition coefficient (log Kow) : 1.78	

10. STABILITY AND REACTIVITY

Chemical stability:	The product is stable without water.
Reactions:	No data available.
Possibility of Hazardous Reactions:	Strong oxidizing agents: Fire and explosion. Strong Bases: Hydrolysis. Strong acid: Hydrolysis, fire and explosion. Plastic product will be corroded.
Conditions to avoid:	Avoid contact with heat, open flame, sparks, or ignition sources.
Materials to avoid:	Strong Bases, strong acid, strong oxidizing agents and reducing agents.
Hazardous decomposition products:	Acetic acid and isobutyl alcohol.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	LD50 (Oral, rat): 13,400 mg/kg
Sensitization:	Excessive overexposure may cause giddiness, dizziness, headache, nausea and in extreme cases, unconsciousness and respiratory depression.
Chronic toxicity:	May cause dry skin by dissolving skin oils.
Further toxicological information:	No data available



12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish: No data available.

Toxicity to daphnia and other aquatic invertebrates: No data available.

Toxicity to algae: No data available.

Toxicity to bacteria: No data available.

Biodegradability Remarks: BOD5 and BOD20 are 60% and 80% respectively. Might be decomposition in the water. The product's half-life among 20.6 hours if it released in the air and reacted with Hydrogen free radical

Half-life (Air): 11.5 hours

Half-life (water): 47-564 hours

Bioaccumulative potential: May not cause Bio-accumulative. This product can be metabolic by the animal examination.

Mobility: This product can be biodegradable in the soil.

Affected in any other way: No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

Material Disposal: Discharge, treatment or disposal is subject to national, state, or local laws. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Container Disposal: No data available.

14. TRANSPORT INFORMATION

ADR/RID

UN-No: 1213

Class: 3

Packing group: II

Proper shipping name: Isobutyl Acetate



IMDG

UN-No: 1213

Class: 3

Packing group: II

Ocean pollutant: No

Proper shipping name: Isobutyl Acetate

IATA

UN-No: 1213

Class: 3

Packing group: II

Proper shipping name: Isobutyl Acetate

15. REGULATORY INFORMATION

Applicable Regulation:

1. Labor Safety and Health Law.
2. Dangerous Chemical Material Symbol Act.
3. Fire Services Act.

16. OTHER INFORMATION

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