


Material Safety Data Sheets

Section 1. Identification of substance

Product Name : Isobutylene
CAS Number: 115-11-7
Manufacturer/Supplier : EXCEL Chemical Corporation
Plant Address : Plant Address: 1 kung-Yeh, 2nd Rd., Lin-Yuan, Kaohsiung, Taiwan
Emergency Telephone Numbers : +886-07-6411122 /FAX : +886-07-6411125
e-mail: tascosm @ms9.hinet.net

Section 2. Hazards identification

Hazard Classification : 
Signal Word : DANGER
Emergency Overview Color: colorless Physical Form: liquefied gas Odor: petroleum odor Health Hazards: central nervous system depression, difficulty breathing Physical Hazards: Flammable gas. May cause flash fire.
Potential Health Effects: Inhalation Short Term: irritation, nausea, vomiting, headache, symptoms of drunkenness, disorientation, tingling sensation, suffocation, convulsions, coma Long Term: no information on significant adverse effects Skin Short Term: burns, frostbite Long Term: no information is available Eye Short Term: irritation, frostbite, blurred vision Long Term: no information on significant adverse effects Ingestion Short Term: frostbite Long Term: no information is available

Section 3. Composition/information on ingredients

Chemical Name : Isobutylene
Molecular formula: C ₄ H ₈

Section 4. First Aid Measures

Inhalation If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.
Skin If frostbite or freezing occur, immediately flush with plenty of lukewarm water (105-115 F; 41-46 C). DO NOT USE HOT WATER. If warm water is not available, gently wrap affected parts in blankets. Get immediate medical attention.
Eyes Contact with liquid: Immediately flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.
Ingestion If a large amount is swallowed, get medical attention.
Note to Physicians For inhalation, consider oxygen.

Section 5. Fire Fighting Measures

Flammable Properties

Severe fire hazard. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Vapor/air mixtures are explosive above flash point.

Extinguishing Media

carbon dioxide regular dry chemical

Large fires: Flood with fine water spray.

Fire Fighting Instructions:

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. For fires in cargo or storage area: Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny entry. Let the fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For tank, rail car or tank truck: Stop leak if possible without personal risk. Let burn unless leak can be stopped immediately. For smaller tanks or cylinders, extinguish and isolate from other flammables. Evacuation radius: 800 meters (1/2 mile). Do not attempt to extinguish fire unless flow of material can be stopped first. Flood with fine water spray. Cool containers with water spray until well after the fire is out. Apply water from a protected location or from a safe distance. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Evacuate if fire gets out of control or containers are directly exposed to fire. Evacuation radius: 500 meters (1/3 mile). Consider downwind evacuation if material is leaking. Stop flow of gas.

Section 6. Accidental Release Measures

Spill or Leak Instructions

Avoid heat, flames, sparks and other sources of ignition. Do not touch spilled material. Stop leak if possible without personal risk. Reduce vapors with water spray. Keep unnecessary people away, isolate hazard area and deny entry. Remove sources of ignition. Ventilate closed spaces before entering.

Section 7. Handling and Storage

Handling and Storage:

Store and handle in accordance with all current regulations and standards. Grounding and bonding required.

Section 8. Exposure Controls, Personal Protection

Personal Protective Equipment

Eyes/Face

For the gas: Eye protection not required, but recommended. For the liquid: Wear splash resistant safety goggles. Contact lenses should not be worn. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Protective Clothing

For the gas: Protective clothing is not required. For the liquid: Wear appropriate protective, cold insulating clothing.

Glove Recommendations

Wear insulated gloves.

Respiratory Protection

Under conditions of frequent use or heavy exposure, respiratory protection may be needed.

Respiratory protection is ranked in order from minimum to maximum.

Consider warning properties before use.

Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode.

Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.

For Unknown Concentrations or Immediately Dangerous to Life or Health -

Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode.

Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.

Section 9. Physical /Chemical Properties

Appearance : colorless gas	Odor: petroleum odor
Molecular Weight: 56.12	Vapor Pressure: 2308mmHg@25°C
Boiling Point : -7°C	Melting Point:-140.3°C
Specific Gravity: 0.5879 @ 25 °C	Water Solubility: almost insoluble
Vapor Density (air=1):1.9	Auto Ignition : 465 °C

Section 10. Stability and Reactivity

Chemical Stability Stable at normal temperatures and pressure.
Conditions to Avoid Avoid heat, flames, sparks and other sources of ignition. Minimize contact with material. Containers may rupture or explode if exposed to heat.
Materials to Avoid oxidizing materials.
Decomposition Products oxides of carbon
Possibility of Hazardous Reactions Will not polymerize.

Section11. Toxicological Information

Component Analysis - LD50/LC50 The components of this material have been reviewed in various sources and the following selected endpoints are published: Isobutylene (115-11-7) Inhalation LC50 Rat: 620 mg/L/4H
Acute Toxicity Level Isobutylene (115-11-7) Non Toxic: inhalation.
Component Carcinogenicity Isobutylene (115-11-7) ACGIH: A4 - Not Classifiable as a Human Carcinogen
Target Organs Isobutylene (115-11-7) central nervous system.

Section 12. Ecological Information

Component Analysis - Aquatic Toxicity LC50(fish) : 2600mg/l/24H No more detailed ecotoxicity data are available for this product's components.

Section 13. Disposal Considerations

Disposal Methods Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001. Component Waste Numbers The U.S. EPA has not published waste numbers for this product's components.

Section 14. Transport Information

US DOT Information Shipping Name: Isobutylene UN/NA #: UN1055 Hazard Class: 2.1 Required Label(s): 2.1 TDG Information Shipping Name: Isobutylene UN #: UN1055 Hazard Class: 2.1 Required Label(s): 2.1
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Section 15. Regulatory Information

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Section 16. Additional Information

Remark	" - " means no data , and " / " means not suitable.
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- ⊗ This information is only suitable for this product, and It does not suit that if this product is to be a additive agent or mixed with other chemicals.
- ⊗ The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.