



## SECTION 1: Identification of substance/preparation and company

Identification of substance:

### Butane

Selling Company:

BernzOmatic  
One BernzOmatic Dr.  
Medina  
New York, USA  
14103

EC Representative:

Irwin Industrial Tools  
Industriholmen 15A  
Hvidovre DK 2650  
Denmark

Manufacturer

Petromont & Company  
Limited Partnership  
2931 Marie-Victorin Blvd.  
Varenes, Quebec  
Canada  
J3X 1S7

Emergency Numbers:

US 800 654 9011

Can 514 640 6400

## SECTION 2: Composition/information on ingredients

<u>SUBSTANCE</u>	<u>CONCENTRATION</u>	<u>CAS #</u>	<u>EEC #</u>	<u>HAZARD</u>
N,Butane	22%	106-97-8	-	R12
Isobutane	78%	75-28-5		R12

R12 Extremely flammable.

Contains no other substances or impurities that are classified as hazardous for supply as defined in the Dangerous Substances Directive 67/548/EEC (with subsequent amendments and adaptations) and Dangerous Preparations Directive 88/379/EEC (with subsequent amendments and adaptations). In particular, the concentration of dienes, including 1,3 butadiene is less than 0.1%.

## SECTION 3: Hazards identification

Liquefied gas under pressure.

Extremely flammable - explosive air/vapour mixtures may form at ambient temperature.

Skin contact with liquid will cause cold burns and frostbite.

## SECTION 4: First aid measures

Inhalation: Simple Asphyxiant. May cause drowsiness, headache, blurred vision and irritation of eyes, nose or throat. Remove to fresh air and keep patient warm and calm. If symptoms persist obtain medical advice. Unconscious casualties must be placed in the recovery position. Monitor breathing and pulse rate and if breathing has failed



respiration should be assisted, preferably by mouth-to-mouth method. Administer cardiac massage if necessary. SEEK MEDICAL ATTENTION IMMEDIATELY

Eye contact: Contact with liquid - Flush with water for at least 15 minutes. Apply a sterile, dry dressing. SEEK MEDICAL ATTENTION IMMEDIATELY

Skin contact: Liquified Butane gas can cause frostbite. Contact with liquid - Flush with water for at least 15 minutes. Apply a sterile, dry dressing. SEEK MEDICAL ATTENTION IMMEDIATELY

Ingestion: Not considered a potential route of exposure.

## SECTION 5: Fire fighting measures

Butane gas supplied and stored above its flash point - avoid all naked flames. Pressurised containers may rupture/explode. If possible, stop flow of product. Move container away and cool with water from protected position. Do not extinguish a leaking gas flame unless absolutely necessary - spontaneous explosive re-ignition may occur. Extinguish any other fire.

Extinguishing media: Foam, Dry Chemical, Carbon Dioxide.  
Dry powder recommended for small fires.

Exposure hazards from preparation, combustion products, resulting gases etc.:  
Incomplete combustion may form carbon dioxide.

Special protective equipment: In confined space use self-contained breathing apparatus.

## SECTION 6 Accidental release measures

**Extremely flammable gas severe fire +/- or explosion risk.**

Extinguish all sources of ignition. Evacuate area, ensure adequate ventilation. If possible, stop flow.

In case of major escape of gas wear self contained breathing apparatus when entering area unless atmosphere is proved to be safe. Prevent accumulation of propane in sewers, basements other enclosed areas - severe explosion risk.

Small quantities of spilled liquid may be allowed to evaporate - vapour should be dispersed by effective ventilation.

## SECTION 7: Handling and storage

Only use with equipment which is suitable for this product, its supply, pressure and temperature - contact your supplier in all cases of doubt.



Before using this product in any new process, a thorough material compatibility and safety study should be carried out.

Always check cylinders when first collected, delivered or used, using an approved leak detection fluid.

Storage: Keep container below 50°C in a well ventilated area. Ensure equipment is electrically bonded and earthed to prevent static accumulation. Segregate from acetylene, oxidant gases and other oxidants in store.

## SECTION 8: Exposure controls/personal protection

Do not smoke while handling product.

Wear suitable head, hand and body protection.

Ensure adequate ventilation.

Keep self-contained breathing apparatus readily available for emergency use.

### OCCUPATIONAL EXPOSURE LIMITS

	<u>Long term exposure limit</u>		<u>Short term exposure limit</u>	
BUTANE	800ppm	1400mg/m <sup>3</sup>	1000ppm	1750mg/m <sup>3</sup>

## SECTION 9: Physical and chemical properties

Appearance: Colourless gas.

Odour: Olefinic

Vapour heavier than air.

Boiling point: - 11°C

Melting point: N/A

Critical temperature: Below ambient temperature

Auto ignition temperature: 405°C

Flammability range: 1.8 – 8.4 vol% in air.

Relative density, gas: 2.0 (Air = 1)

Specific gravity: 0.57 (water = 1)

Vapour pressure @ 21°C: 1.9 bar

Solubility in water: Less than 0.1% by weight @ 21°C

## SECTION 10: Stability and reactivity

May form explosive mixtures with air.

May react violently with oxidants.

Hazardous polymerisation will not occur.

## SECTION 11: Toxicological information

Eyes: Contact with liquid will result in serious damage.

Skin: Contact with liquid will cause cold burns and frostbite.

Inhalation: May cause drowsiness, headache, blurred vision and irritation of eyes, nose or throat. High concentrations may have a narcotic effect.



Wilful inhalation of Butane may produce unconsciousness and/or death.

## SECTION 12: Ecological information

Butane is a greenhouse gas.  
No data available.

## SECTION 13: Disposal considerations

Do not dispose of any non-empty Butane container. Cylinders should be emptied and returned to a hazardous waste collection point.

Do not discharge into any area where there is a risk of forming an explosive mixture with air.

Waste gas should be flared through a suitable burner with flash back arrestor. Empty cylinder still contain flammable vapour.

Contact supplier if guidance is required.

## SECTION 14: Transport information

UN Nr.:	1057
Class/Division:	2.1
ADR/RID item Nr.:	2,F
ADR/RID Hazard Nr.:	23
Tremcard Nr.:	27a
Group card Nr.:	20gl I
Labelling ADR	Label No. 2.1: Flammable gas

### Further transport advice:

Avoid transport on vehicles where the load space is not separated from the drivers compartment.

Ensure that the vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency.

Before transporting product containers ensure that they are firmly secured and:

- cylinder valve is closed and not leaking
- valve outlet cap nut or plug (where provided) is correctly fitted
- valve protection devise (where provided) is correctly fitted
- adequate ventilation
- compliance with applicable regulations

## SECTION 15: Regulatory information

Classification:	Extremely flammable.
- Symbols	F+



- Risk phrases R12 Extremely flammable
- Safety phrases S2 Keep out of reach of children
- S3/9 keep in a cool and well ventilated place.
- S16 Keep away from sources of ignition - no smoking
- S36/37/39 Wear suitable protective clothing, gloves  
eye/face protection.

#### SECTION 16: Other information

NFPA Ratings: Health = 1 Flammability = 4 Reactivity = 0  
HMIS Ratings: Health = 1 Flammability = 4 Reactivity = 0  
Hazardous Rating: 4 = Extreme  
3 = High  
2 = Moderate  
1 = Slight  
0 = Insignificant

For further safety information please refer to "Safe Under Pressure" and "Safe handling, storage and transport of Industrial gas cylinders".

**The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.**