

Common Name: **BUTANE**

Synonyms: n-Butane; Butyl Hydride; Diethyl

CAS No: 106-97-8

 Molecular Formula: C₄H₁₀

RTK Substance No: 0273

 Description: Colorless gas with a *Natural gas* odor

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
1 - Health 4 - Fire 0 - Reactivity DOT#: UN 1011 ERG Guide #: 115 Hazard Class: 2.1 (Flammable gas)	FLAMMABLE GAS Stop flow of gas or let fire burn itself out. POISONOUS GASES ARE PRODUCED IN FIRE CONTAINERS MAY EXPLODE IN FIRE. Use water spray to disperse gas, keep fire-exposed cylinders cool, and protect individuals attempting to stop leak. Vapors may travel to a source of ignition and flash back. Vapor is heavier than air and may travel a distance to cause a fire or explosion far from the source.	Butane is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE); and mixtures of NICKEL CARBONYL and OXYGEN.

SPILL/LEAKS

Isolation Distance:

Small Spills: 30 meters (100 feet)

Large Spills: 60 meters (200 feet)

Use water spray to keep cylinders or tanks cool.

 Keep **Butane** out of confined spaces, such as
 sewers, because of the possibility of an explosion.

 Before entering a confined space where **Butane** is
 present, check to make sure sufficient *Oxygen*
 (19.5%) exists.

Will not affect aquatic environments.

PHYSICAL PROPERTIES

Odor Threshold:	50,000 ppm
Flash Point:	-76° to -117° F (-60° to -83° C)
LEL:	1.6%
UEL:	8.4%
Vapor Density:	2.1 (air = 1)
Vapor Pressure:	760 mm Hg at 77°F (25°C)
Specific Gravity:	0.6 (water = 1)
Water Solubility:	Insoluble
Boiling Point:	31°F (-0.5°C)
Ionization Potential:	10.63 eV
Molecular Weight:	58.1

EXPOSURE LIMITS

OSHA:	None
NIOSH:	800 ppm, 10-hr TWA
ACGIH:	1,000 ppm, 8-hr TWA (as <i>Aliphatic hydrocarbon gases</i>)

PROTECTIVE EQUIPMENT

Gloves:	Insulated Neoprene or Rubber
Coveralls:	Clothes designed to prevent freezing of body tissues
Respirator:	>800 ppm - Supplied air

HEALTH EFFECTS

Eyes:	Contact with liquid causes frostbite
Skin:	Contact with liquid causes frostbite
Inhalation:	Headache, lightheadedness, drowsiness and passing out

FIRST AID AND DECONTAMINATION

Remove	the person from exposure.
Flush	eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn. Seek medical attention immediately.
Immerse	affected part in warm water. Seek medical attention.
Transfer	to a medical facility.