

Revised 1 April 2005

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BUTANE FUEL 5 OZ.

MATERIAL IDENTIFICATION

Marketer: Steinel America Inc
9051 Lyndale Ave.
Bloomington, MN 55420

Hazardous Ratings:

4 = Extreme
3 = High
2 = Moderate
1 = Slight
0 = Insignificant

HMIS Hazard Class:

Fire = 4
Health = 1
Reactivity = 0

NFPA Hazard Class:

Fire = 4
Health = 1
Reactivity = 0

Phone Number: (952) 888-5950
Transportation Emergency: (800) 535-5053

Chemical Trade Name,
synonyms: LP Gas, A-28

Chemical Family: Hydrocarbon, LP Gas

Chemical Formula: C₄H₁₀

COMPONENTS

Material	CAS Number	PEL/TLV, Source	Percent
Liquefied Petroleum Gas			
N,Butane, volume	106-97-8	1000 ppm, OSHA	20%
Isobutane, volume	75-28-5	1000 ppm, OSHA	80%

PHYSICAL DATA

Boiling Point	15.5 – 31.1°F
Pressure in can at 70EF	Approx. 30 psig
Vapor Density (Air=1)	Greater than 2
Solubility in water	Less than 0.1% by weight @70F
Specific Gravity (Water=1)	0.5669
Percent Volatile by weight	100%
Evaporation Rate (BuAce=1)	Gas
Appearance and odor	Liquefied compressed gas, flash evaporates at room temperature when released from can, colorless gas with strong mercaptan (skunk-like) odor due to stenching agent added to gas for leak detection purposes.

HAZARDOUS REACTIVITY

Stability	Stable when stored as a liquid in cans under its own pressure.
Conditions to avoid	Contact with sparks, open flame or any source of ignition.
Hazardous Polymerization	Will not occur
Hazardous Decomposition Products	May produce carbon monoxide when oxidized with deficiency of oxygen.

FIRE AND EXPLOSION DATA

Flammability Category	Extremely Flammable (Reference - Consumer Product Commission, flame projection test for aerosol products, per 16 CFR 1500.45)
Flash Point	Less than -117EF
Flammable Limits	LEL% 1.8 UEL% 8.5
Extinguishing Media	If feasible, stop flow of gas. Use water to cool fire-exposed cans, surroundings and to protect personnel working on shut off. Water spray, dry powder or carbon dioxide can be directed at flame area, if gas flow cannot be stopped, to reduce fire intensity. DO NOT COMPLETELY EXTINGUISH FLAME UNLESS GAS FLOW IS SHUT OFF!
Unusual Fire and Explosion Hazards	<p>This product presents an extreme fire hazard. Liquid very quickly evaporates, even at low temperatures, and forms vapor (fumes) which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches.</p> <p>For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing Apparatus against the hazardous effects of normal products of combustion of oxygen deficiency. Petroleum gases are heavier than air and travel along the ground or into drains to possible distant ignition sources, causing an explosive flashback.</p>
Special Fire Fighting Procedures	<p>Avoid possible accumulations of vapors at floor level, as vapor is heavier than air. Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.</p> <p>This product is extremely flammable at all times. Keep away from any sources of inadvertent ignition, including heat, fire, sparks, or flame.</p>

HEALTH HAZARD INFORMATION

Suggested Exposure Guideline	1000 ppm
Primary Route of Exposure	Inhalation, skin contact, eye contact
Inhalation	This product is an asphyxiate and may exhibit anesthetic properties at very high concentrations. Initial symptoms of exposure at these concentrations are disorientation, lack of coordination, rapid respiration, headache, and nausea. Continued exposure May result in unconsciousness, coma, and possible death.
Skin Contact	Vapors are not irritating. Freeze burns or frostbite possible if skin is in prolonged contact with vaporizing liquid.
Eye Contact	Same as skin contact.
Carcinogenicity	None of the components in this material are listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.

FIRST AID

Inhalation	Remove to fresh air. Artificial respiration, consult physician.
Skin Contact	Wash with soap and water. Remove soaked clothing to avoid prolonged skin contact.
Eye Contact	Flush eyes well with running water for 15 minutes.
Ingestion	NA, product is gaseous at normal temperature and pressure.

SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Protect from any ignition source, keep away from heat, fire, sparks, or flame. Ventilate area well. Avoid accumulation of vapor at low levels.
Waste disposal method	Dispose of in accordance with all local, state and federal regulations. Do not puncture or incinerate.

SPECIAL PROTECTION INFORMATION

Respiration Protection	If TLV is exceeded wear NIOSH-approved self-contained breathing device or respirator.
Ventilation	Must be adequate to maintaining airborne concentrations below established exposure limits, particularly at floor level as vapors are heavier than air.
Protective gloves	None needed for normal use. Thermal insulated gloves when handling if prolonged exposure expected.
Eye Protection	Safety glasses or goggles recommended

HANDLING AND STORAGE PRECAUTIONS

Precautions to be taken
in handling and storage

Do not store where temperature may exceed 120°F. Store away from, fire, sparks, or flame. Store in suitable area for hazardous materials storage.

D.O.T. Shipping
Classification

Liquefied petroleum gas, 2.1

Hazard Class

2.1

ID Number

UN1075

Label Required

Flammable Gas

TSCA Statement: All the components of this product are in compliance with the Toxic Substances Control Act (TSCA) and are either listed on the TSCA Inventory or otherwise exempted from listing.

SPECIAL PRECAUTIONS

Precautions for usage

Do not use near heat, fire, flame or sparks. Avoid excessive breathing of vapor. Do not spray in direction of body. Use only in accordance with directions.

Notice: This data represents typical values, not product specifications. No guarantee of accuracy or completeness is made. No responsibility is assumed for any kind of loss or damages arising from use of this data.

End of MSDS