

Powers Fasteners, Inc. • 2 Powers Lane, Brewster, NY, USA 10509 • Phone (914) 235-6300

MATERIAL SAFETY DATA SHEET

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

Product identifier: NAILER GAS FUEL

Product use: Fuel.

Chemical Family: Mixture of petroleum hydrocarbons.

Supplier's name and address:

Powers Fasteners, Inc.

2 Powers Lane

Brewster, NY, U.S.A.

10509

Phone: 914-235-6300 (8 AM to 8 PM EST, Monday to Thursday; 8 AM to 7 PM EST, Friday)

Manufacturer's name and address:

Refer to Supplier

Emergency Tel.#: CHEMTREC – 800-424-9300

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredients</u>	<u>CAS #</u>	<u>% (weight)</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
			<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
N-Butane	106-97-8	40 – 70	1000 ppm	N/Av	800 ppm (final rule)	N/Av
Methyl Acetylene and Propadiene	74-99-7 463-49-0	15 – 40	1000 ppm	N/Av	1000 ppm	N/Av
Propylene	115-07-1	15 – 40	500 ppm	N/Av	N/Av	N/Av
Propane	74-98-6	0.5 – 1.5	1000 ppm	N/Av	1000 ppm	N/Av
Saturated C4's (Isobutane and n-Butane)	75-28-5 106-97-8	3 – 7	1000 ppm	N/Av	800 ppm (final rule)	N/Av

This material is classified as hazardous under OSHA regulations (29CFR 1910.1200).

SECTION 3 — HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Clear, colorless liquefied gas. Essentially odorless.

Danger! Flammable gas. Contents under pressure. May cause flash fire. Asphyxiation hazard.

Inhalation could cause headache, nausea, dizziness or other central nervous system effects.

May cause respiratory tract irritation. May cause skin and eye irritation or freezing.

Contains material which may be mutagenic.

POTENTIAL HEALTH EFFECTS

Target organs: Eyes, skin, respiratory system, central nervous system.

Routes of exposure: Skin contact, eye contact, and inhalation.

Signs and symptoms of short-term (acute) exposure:

Inhalation: Inhalation may cause irritation to the upper respiratory tract, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Inhalation of higher concentrations may cause inflammation of lung tissue, bronchitis, wheezing, pulmonary edema and eventually death. In confined or poorly ventilated areas where the vapor concentration is very high, product may act as an asphyxiant and cause increased breathing and pulse rates, fatigue, nausea and vomiting.

Skin: Direct contact may cause irritation. Symptoms of frostbite may be experienced including numbness, prickling and itching.

Eyes: Direct eye contact may cause mild irritation, tearing and discomfort. If sprayed directly onto eye, product may freeze the eye and cause eye damage.

Ingestion: Not an applicable route of exposure for gases.

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SECTION 3 — HAZARDS IDENTIFICATION Continued

Chronic effects: Prolonged or repeated inhalation may cause severe, permanent respiratory impairment and lung injury.

Conditions aggravated by exposure: Pre-existing skin, eye and respiratory disorders.

Carcinogenic status: See TOXICOLOGICAL INFORMATION, Section 11.

Additional health hazards: Potential mutagen. See TOXICOLOGICAL INFORMATION, Section 11.

Potential environmental effects: See ECOLOGICAL INFORMATION Section 12.

SECTION 4 — FIRST AID MEASURES

Inhalation: Immediately remove person to fresh air. If breathing is difficult, oxygen may be administered by qualified personnel. Seek immediate medical attention.

Skin contact: Treat burned or frostbitten skin by flushing or immersing affected areas in lukewarm water. If skin is not burned, keep warm and stimulate circulation with massage. Seek immediate medical attention.

Eye contact: Immediately flush eyes with running water for a minimum of 15 minutes. Remove contact lenses if they are worn. Seek immediate medical attention.

Ingestion: Not an applicable route of exposure for gases. No first aid usually necessary.

Note to Physicians: Treat symptomatically.

SECTION 5 — FIRE FIGHTING MEASURES

Fire hazards/conditions of flammability: Flammable gas. Closed containers are contained under pressure and will explode if exposed to excess heat or flame. Vapors are heavier than air and will collect in low-lying areas. The vapors may travel to a distant source of ignition and flashback.

Flammability classification (OSHA 29 CFR 1910.1200): Flammable gas.

Flash point (Method): -104°C / -156°F

Auto-ignition temperature: N/Av

Lower flammable limit (% by vol.): 1.8

Upper flammable limit (% by vol.): 11.0

Explosion data: *Sensitivity to mechanical impact / static discharge:* May be sensitive to static discharge. Not expected to be sensitive to mechanical impact.

Oxidizing properties: None known.

Suitable extinguishing media: If feasible, stop the flow of gas. Use water to cool fire exposed tanks, surroundings and to protect personnel working on shut off. Water spray, dry powder or carbon dioxide can be directed at flame area to reduce fire intensity if gas flow cannot be stopped. Do not completely extinguish flame unless gas flow is shut off.

Special fire-fighting procedures/equipment: Do not enter fire area without proper protection. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece. Shield personnel to protect from venting, rupturing or bursting containers. Move containers from fire area if it can be done without risk. Water spray may be useful in cooling equipment exposed to heat and flame.

Hazardous combustion products: Carbon oxides, peroxides, formaldehyde and other irritating fumes and smoke.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal precautions: Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate chemically protective equipment. Keep all other personnel upwind and away from the spill/release. Refer to Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

Environmental precautions: Ensure the product does not enter drains, sewers, waterways or confined spaces.

Spill response/Cleanup: Eliminate all sources of heat, sparks and flame. Ventilate area of release. Turn off gas flow if you can do so without risk. Isolate for ½ mile in all directions if tank or tank car is involved in fire. Notify the appropriate authorities as required. North American Emergency Response Guide #115.

Prohibited materials: None known.

Special spill response procedures: In case of a transportation accident, contact CHEMTREC at 1-800-424-9300 or International at 1-703-527-3887. If a spill/release in excess of EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).

DOT/CERCLA Reportable quantity (RQ): None reported

SECTION 7 — HANDLING AND STORAGE

Safe handling procedures: This material is a flammable gas. Wear protective equipment during handling. Use in a well-ventilated area. Do not inhale vapors. Avoid contact with eyes and skin. Keep away from heat, sparks, flame and direct sunlight. Keep away from acids and incompatibles. Do not puncture or incinerate containers. Electrically ground and ground all lines of equipment. Follow standard procedures for handling cylinders and tanks of flammable, compressed gases.

Storage requirements: Store in a cool, dry, well-ventilated area away from sources of heat, ignition and sunlight. Keep away from incompatibles. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking in the area.

Special packaging materials: Always keep in containers made of the same materials as the supply container.

SECTION 8 — EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ventilation and engineering controls: Use adequate ventilation to maintain air contaminants below exposure limits. Local and/or general exhaust may be required

Respiratory protection: Respiratory protection is required if the airborne concentration exceeds exposure limits. When concentrations exceed the exposure limits specified, use NIOSH/MSHA-approved air-purifying respirators. In poorly ventilated or confined spaces, use a NIOSH/MSHA-approved self-contained breathing apparatus. Advice should be sought from respiratory protection specialists.

Skin protection and other protective equipment: Thermally insulated protective gloves must be worn during use. Confirmation of what type of material is most suitable for the intended application, should be obtained from glove suppliers. Additional impervious protective clothing is recommended to prevent skin contact. An eyewash station and safety shower should be made available in the immediate working area.

Eye / face protection: Use chemical goggles and face shield when contact with product is possible.

General hygiene considerations: Do not inhale vapors. Avoid contact with eyes and skin. Do not eat, drink or smoke when working. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities.

Permissible exposure levels: For individual ingredient exposure levels, see Section 2.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Physical state, odor and appearance: Clear, colorless, practically odorless liquefied gas.

Odor threshold: N/Av

Specific gravity: 0.579

Vapor pressure: 60 psig

Boiling point: -42°C / -44°F

Evaporation rate (n-Butyl acetate = 1): N/Av

Coefficient of water/oil distribution: N/Av

Solubility in water: <0.1% by weight

Vapor density (Air = 1): >1.5% by weight

Freezing point: <-138°C / -217°F

pH: N/Av

Volatiles (% by weight): 100

SECTION 10 — REACTIVITY AND STABILITY DATA

Stability and reactivity: Stable when stored as a liquid in steel tanks under its own vapor pressure.

Hazardous polymerization: Will not occur.

Conditions to avoid: Contact with sparks, flame and other sources of ignition.

Materials to avoid (incompatibles): Strong oxidizers (e.g. chlorine, peroxides, etc.), halogen compounds, strong acids, nitrogen oxides.

Hazardous decomposition products: May produce carbon monoxide when oxidized with a deficiency of oxygen. Refer also to 'Hazardous Combustion products', Section 5.

SECTION 11 — TOXICOLOGICAL INFORMATION

Carcinogenic status: None of the ingredients listed are classified as carcinogenic by IARC, ACGIH, NTP or OSHA.

Reproductive effects, Teratogenicity, Mutagenicity: Propylene is considered mutagenic based on animal data.

Sensitization to material: Not expected to be a skin or respiratory sensitizer.

Other important hazards: CNS depression may result from exposure.

Synergistic materials: Not available.

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SECTION 11 — TOXICOLOGICAL INFORMATION Continued

Toxicological data: There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

Ingredients	LC ₅₀ (ppm/4hr) inh, rat	LD ₅₀ (mg/kg)	
		oral, rat	dermal, rabbit
N-Butane	276,000	Not available	Not available
Methyl Acetylene	>51,440	Not available	Not available
Propadiene	Not available	Not available	Not available
Propylene	Not Available	Not available	Not available
Propane	Not Available	Not available	Not available
Isobutane	>13,023	Not available	Not available

SECTION 12 — ECOLOGICAL INFORMATION

Chemical fate information: The ecological characteristics of this product have not been fully investigated. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. Do not discharge product unmonitored into the environment.

Ecotoxicological information: There is no data available on the product itself.

SECTION 13 — DISPOSAL CONSIDERATIONS

Handling for disposal: Empty containers may contain product residue or vapors. Handle according to recommendations listed in Section 7.

Methods of disposal: Dispose in accordance with all applicable federal, state, provincial and/or local regulations. Contact your local, state, provincial and/or federal environmental agency for specific rules.

RCRA: If this product, as supplied, becomes a waste, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. Under the RCRA, it is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 — TRANSPORTATION INFORMATION

US 49 CFR information:

Proper Shipping Name: Hydrocarbon gas mixture, liquefied, n.o.s.

Hazard Class - Primary: 2.1

Identification No.: UN1965

Packing Group: Not applicable

Special Transportation Notes: For shipments by ground within the United States, the Limited Quantity or Consumer commodity exceptions may apply. Under the US 49 CFR, refer to Section 173.306 for additional exception information, if shipping under this exception.

Label Codes: 2.1

RQ LBS: None reported

RQ Components: Not applicable

Marine Pollutant: None

Canadian Transportation of Dangerous Goods Regulations (TDGR) information:

Proper Shipping Name: HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S.

Primary Class(es): 2.1

Packing Group: Not applicable

Subsidiary Class(es): None

UN No.: UN1965

Other Shipping Information: This product may be shipped by ground within Canada, as a 'Consumer commodity' or a 'Limited Quantity'. Refer to Section 1.17 for Limited Quantity and Consumer Commodity Information, if shipping under this exemption.

International IATA / ICAO information:

Proper Shipping Name: Hydrocarbon gas mixture, liquefied, n.o.s.

Packing Instruction(s), passenger aircraft: Forbidden

UN No.: UN1965

Primary Class(es): 2.1

Packing Instruction(s), cargo aircraft only: 200

Packing Group: Not applicable

Subsidiary Class(es): None

Other Shipping Information: This product may not be shipped internationally by air, as a 'Limited Quantity'.

SECTION 15 — REGULATORY INFORMATION

US Federal Information:

TSCA information: All ingredients are listed on the TSCA inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.

SARA TITLE III:

Sec. 302, Extremely Hazardous Substances, 40 CFR 355: No Extremely Hazardous Substances are present.

Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: Immediate (Acute); Delayed (Chronic); Fire Hazard; Pressure Hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material may be subject to SARA notification requirements, since it contains Propylene, a Toxic Chemical constituent above its *de minimus* concentration.

US State Right to Know Laws:

California Proposition 65: To the best of our knowledge, this product does not contain any chemicals known to the State of California to cause cancer or reproductive harm.

New Jersey Labeling Requirements: This product contains the following substances that may be required to be disclosed on product labeling:

Chemical Name	CAS #	% (weight)	New Jersey Hazardous Substance
N-Butane	106-97-8	40 – 70	Yes
Methyl Acetylene	74-99-7	15 – 40	Yes
Propadiene	463-49-0	15 – 40	Yes
Propylene	115-07-1	15 – 40	Yes
Isobutane	75-28-5	3 – 7	Yes
Propane	74-98-6	0.5 – 1.5	Yes

International Information:

Canadian WHMIS Classification: **Class A** (*Compressed gas*); **Class B1** (*Flammable gases*); **Class D2B** (*Materials Causing Other Toxic Effects, Toxic Material*).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and this MSDS contains all the information required by the CPR.

Canadian CEPA information: All ingredients are present on the DSL.

SECTION 16 — OTHER INFORMATION

NFPA Rating:

0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe

Health: 1 Flammability: 4 Instability: 1 Special Hazard: None

HMIS Rating:

* - Chronic hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe

Health: *1 Flammability: 4 Reactivity: 1

Prepared by: Powers Fasteners, Inc.

Telephone No.: 914-235-6300

Preparation date: January 10, 2008

References:

1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2006.
2. International Agency for Research on Cancer Monographs, searched 2007.
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2008 (Chempendium and RTECs).
4. Material Safety Data Sheet from manufacturer.
5. US EPA Title III List of Lists – January 27, 2005 version.
6. California Proposition 65 List – September 28, 2007 version.

SECTION 16 — OTHER INFORMATION Continued

Legend: ACGIH: American Conference of Governmental Industrial Hygienists
AIHA: American Industrial Hygiene Association
CAS: Chemical Abstract Services
CERCLA: US Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: US Code of Federal Regulations
DOT: US Department of Transportation
DSL: Canadian Domestic Substances List
EPA: US Environmental Protection Agency
HMIS: Hazardous Materials Identification System
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IARC: International Agency for Research on Cancer
N/Ap: not applicable
N/Av: not available
NFPA: National Fire Protection Association
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
RCRA: US Resource Conservation and Recovery Act
SARA: US Superfund Amendments & Reauthorization Act
STEL: Short Term Exposure Limit
TLV: Threshold Limit Values
TWA: Time Weighted Average
TSCA: Toxic Substance Control Act
WEEL: Workplace Environmental Exposure Level
WHMIS: Canadian Workplace Hazardous Materials Identification System

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