SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identity: Butane Fuel – 1.18 oz, 2.1 oz and 10 oz

Recommended use of the chemical and restrictions on use:

Manufacturer: J & M Special Effects
54 Commerce St
Brooklyn, NY 11209

Telephone: (718) 875-0140

Emergency Phone: Infotrac 1-800-535-5035

SDS Date of Preparation: 1/15/16

2. HAZARDS IDENTIFICATION

OSHA/GHS Classification:

Physical	Health
Flammable Gas Category 1 Gas Under Pressure: Liquefied Gas	Not Hazardous

GHS Label Elements:
Danger!

Statements of Hazard

Extremely flammable gas
Contains gas under pressure; may explode if heated.

Precautionary Statements

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
In case of leakage, eliminate all ignition sources.
Protect from sunlight. Store in a well-ventilated place.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount
Butane	75-28-5	80%
Isobutane	106-97-8	20%

The exact concentration is being withheld as a trade secret.

4. FIRST AID MEASURES

Eye: No first aid required.

Skin: No first aid required.
Ingestion: Not a likely route of exposure. No first aid required.
Inhalation: Remove victim to fresh air. If breathing is difficult or irritation persists, get medical attention**.**

Most important Symptoms: Inhalation of large amounts may cause narcotic effects and cardiac arrhythmia.

Indication of immediate medical attention/special treatment: Immediate medical attention is generally not required.

5. FIRE FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Use dry chemical, carbon dioxide or halon extinguishers. Cool fire exposed containers and structures with water. If leak or spill has caught fire, use water spray to disperse gas and to protect personnel shutting off leak.

Specific hazards arising from the chemical: Extremely flammable gas. Contents under pressure. Keep away from ignition source and open flames. Exposure of containers to heat and flames can cause them to rupture, often with violent force. Combustion may produce oxides of carbon.

Special Protective Equipment and Precautions for Fire-Fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. If material on fire or involved in fire: Do not extinguish fire unless flow can be stopped. Use shielding to protect against bursting canisters.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: Evacuate spill area and keep unprotected personnel away. Eliminate all sources of ignition. Wear appropriate protective clothing and equipment.

Methods and Materials for Containment and Cleaning Up: Place leaking canister in a pail in a well-ventilated area away from ignition sources until pressure has dissipated.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with the eyes. Avoid prolonged or repeated skin contact. Use with adequate ventilation. Keep product away from heat, direct sunlight and all sources of electricity. Keep out of the reach of children. Do not puncture or incinerate containers. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity.

Conditions for Safe Storage, Including Any Incompatibilities: Store in a cool, well-ventilated area, away from incompatible materials. Do not store in direct sunlight or above 120°F.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Butane (as Butane, all isomers)	1000 ppm TWA ACGIH TLV
Isobutane (as Butane, all isomers)	1000 ppm TWA ACGIH TLV

Engineering Controls: Use with general or adequate local exhaust ventilation to maintain exposures below occupational exposure limits.

Respiratory Protection: None required for normal use. If the occupational exposure limits are exceeded, an approved respirator with organic vapor filters appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.
Skin Protection: None required.
Eye Protection: None required.
Other: None required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance And Odor: Liquefied gas in a canister

Physical State: Liquefied gas in a canister	**Odor Threshold:** Not determined
Vapor Density: > 2	**Initial Boiling Point/Range:** 24.3^{o}C (-11.7^{o}F)
Solubility In Water: < 0.1% w/w @ 21^{o}C (70^{o}F)	**Vapor Pressure:** Not applicable
Relative Density: 0.5676 (Liquefied gas)	**Evaporation Rate:** Gas
Melting/Freezing Point: Not determined	**pH:** Not determined
VOC Content: Not determined	**Octanol/Water Coefficient:** Not determined
Solubility: Negligible in water	**Decomposition Temperature:** Not determined
Viscosity: Not determined	**Flammability(solid, gas):** Not applicable
Flashpoint: < -82.8^{o}C (< -117^{o}F)	**Autoignition Temperature:** Not determined
Flammable Limits: LEL: 1.8%	**UEL:** 8.4%

10. STABILITY AND REACTIVITY

Reactivity: Not normally reactive
Chemical Stability: Stable under normal storage and handling conditions.
Possibility of Hazardous Reactions: Reacts with strong oxidants, acetylene, halogens and nitrogen oxides causing fire and explosion hazard.
Conditions to Avoid: Keep away from excessive heat, sparks and open flames. Containers may rupture at temperatures > 120^{o}F (48.8^{o}C). Do not puncture or incinerate canisters.
Incompatible Materials: Strong oxidizers, chlorine, fluorine and nickel carbonyl with oxygen.
Hazardous Decomposition Products: When heated to decomposition emits oxides of carbon.

11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS:
Ingestion: Not a likely route of exposure.
Inhalation: Inhalation may cause irritation of the nose throat and upper respiratory tract.
Eye: Not a likely route of exposure.
Skin: Not a likely route of exposure.
Sensitization: This material is not known to cause sensitization.
Chronic: None known.
Carcinogenicity: None of the components is listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.
Germ Cell Mutagenicity: None currently known.
Reproductive Toxicity: None currently known.

Numerical Measures of Toxicity:
Butane: Inhalation rat LC50: 1443 mg/L/15 min
Isobutane: Inhalation rat LC50: 1443 mg/L/15 min

12. ECOLOGICAL INFORMATION

Ecotoxicity:
Butane Fish LC50: 27.98 mg/L/96 hr
Isobutane: Fish LC50: 27.98 mg/L/96 hr

This product is not expected to be harmful to the enivironment.
Persistence and Degradability: Butane and Isobutane: Readily biodegradable: 100% in 385.5 hr
Bioaccumulative Potential: No data available
Mobility in Soil: No data available
Other Adverse Effects: None known

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations. No specific disposal method is recommended. Do not puncture or incinerate containers.

14. TRANSPORT INFORMATION

For the 10oz and 2oz cans:
DOT Hazardous Materials Description:
Proper Shipping Name: Liquefied Petroleum Gas
UN Number: UN1075
Hazard Class/Packing Group: 2.1
Labels Required: None

For the 1oz can:
DOT Hazardous Materials Description:
Proper Shipping Name: Aerosols
UN Number: UN1950
Hazard Class/Packing Group: 2.1, Limited Quantity
Labels Required: None

15. REGULATORY INFORMATION

CERCLA: This product is not subject to CERCLA release reporting. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Fire Hazard, Sudden Release of Pressure

SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

EPA TSCA Inventory: All of the ingredients in this product are listed on the EPA TSCA Inventory.

16. OTHER INFORMATION

NFPA Rating: Health = 1 Flammability = 4 Instability = 0
HMIS Rating: Health = 1 Flammability = 4 Physical Hazard = 0

Date of current revision: 1/15/16
Revision History: New document.
Date of previous revision: New SDS

NOTICE

This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. J&M Special Effects shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.