FANCYHEAT CORPORATION SAFETY DATA SHEET

1. PRODUCT IDENTIFIER

SDS# 954 ITEM# S0833009

PRODUCT NAME ------ Butane Fuel

PRODUCT NUMBER(S)-----> 17300-F300, F305

TRADE NAMES AND SYNONYMS--> FancyHeat Butane Fuel Cartridge

RECOMMENDED USE: Fuel

USES ADVISED AGAINST: No information available

DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: FANCYHEAT CORPORATION

Address: **40 VERONICA AVENUE**

SOMERSET, NJ 08873

Telephone: 1-973-589-1450 (General)

1-973-968-3412 (Office)

1-732-249-0087 Fax:

Emergency Telephone Number

Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910 (OSHA HCS) Extremely flammable gas (Flam Gas 1) Contains gas under pressure; may explode if heated (Press Gas) Simple **Asphyxiant**

Classification and Labelling according to Regulation (REACH) 1272/2008/EC (CLP) Basis for Classification This substance is classified based on Directive 67/548/EEC or Directive 1999/45/EC, see Section 16 for more details

Complete Risk and Safety Phrases. Symbol(s)



F+; Extremely flammable

Risk Phrases R12 Extremely flammable



GHS Label elements, including precautionary statements

Signal word:

Danger

Hazard statement(s)

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

May displace oxygen and cause rapid suffocation.

Precautionary statement(s)

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

P381 Eliminate all ignition sources if safe to do so.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. INGREDIENTS

Ingredient	CAS No.	% by V Range	VT. CLASSIFICATION
Butane	106-97-8 EC-No.203-448-7 Index# 601-004-00-0	50- 100	Extremely flammable gas(Flam Gas 1), H220 Contains gas under pressure; may explode if heated (Press Gas), H280 Simple Asphyxiant
Isobutane	75-28-5 EC-No.200-857-2 Index# 601-004-00-0	25- 50	Extremely flammable gas(Flam Gas 1), H220 Contains gas under pressure; may explode if heated (Press Gas), H280 Simple Asphyxiant
Propane	74-98-6 EC-No.200-827-9 Index-No.601-003-00-5	2.5- 10	• • •

4. FIRST-AID PROCEDURES

INHALATION: BUTANE FUEL

**FIRST AID- Remove form exposure area to fresh air immediately. If not breathing, give artificial respiration. Treat symptomatically and supportively. Get medical attention in case of complaints.

SKIN CONTACT: BUTANE FUEL

**FIRST AID- Generally the product does not irritate the skin.

EYE CONTACT: BUTANE FUEL

**FIRST AID- Wash eyes immediately with large amounts of water occasionally lifting upper and lower lids (approximately 15-20 minutes). Remove contact lenses, if worn, after initial flush. If symptoms persist consult a physician.

INGESTION: BUTANE FUEL

**FIRST AID- If symptoms persist, consult a physician.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED: No further relevant information available.
INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED: No further relevant information available.

5. FIRE FIGHTING MEASURES

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

No further relevant information available.

Flash Point: <0°F TCC

LEL %:1.5

Auto-ignition Temp: 365°C (689°F)

UEL %:8.5

SUITABLE EXTINGUISHING MEDIA: CO2, powder or water spray.

<u>CONDITIONS OF FLAMMABILITY</u>: Flammable in the presence of a source of ignition when the temperature is above the flash point.

ADVICE FOR FIREFIGHTERS:

Protective equipment: No special measures required.

For safety reasons unsuitable extinguishing agents: Water with full jet Fight

larger fires with water spray or alcohol resistant foam.

Additional information Cool endangered receptacles with water spray.

UNUSUAL FIRE AND EXPLOSION HAZARDS: No further relevant information available.

<u>COMBUSTION PRODUCTS</u>: Highly dependent on combustion conditions. A complex mixture of airborne gases including carbon monoxide, carbon dioxide, carbon oxides and other unidentified organic compounds evolve when this material undergoes combustion.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE MEASURES: Extremely Flammable Gas; Eliminate ignition sources in the vicinity of the released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations. For large releases evacuate downwind areas as conditions warrant to prevent exposure and to allow vapors or fumes to dissipate. Beware of vapors accumulating to form explosive concentrations.

<u>METHODS FOR CONTAINMENT AND CLEAN UP</u>: Use explosion proof equipment. Shut off valves, contain spill, keep out of water sources and sewers, Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations.

7. HANDLING AND STORAGE

<u>PERSONAL PRECAUTIONARY MEASURES</u>: This material presents a fire hazard. Open and handle receptacle with care. Keep ignition sources away. Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Do not smoke.

<u>HANDLING INFORMATION</u>: Avoid work practices that may release volatile components in the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close containers.

STATIC HAZARD: Electrostatic charge may accumulate and create a hazardous condition when handling this material. Refer to National Fire Protection Association (NFPA 77) "Recommended Practice on Static Electricity".

<u>CONDITIONS FOR SAFE STORAGE</u>: Follow maximum allowed pile heights specified in the BOCA codes or the NFPA manual. Local fire authorities should be notified for storage of this material in any quantity. Local permits are required for storage in warehouse quantities. Store quantities only in cool, dry areas in well sealed receptacles. Do not contact with oxidizing materials. Keep containers tightly sealed and upright when not in use. Protect from heat and direct sunlight.

CONTAINER WARNINGS: Containers should be Bonded and Grounded when pouring. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition.

EXPOSURE CONTROL (PERSONAL PROTECTION)

EXPOSURE GUIDELINES:

Ingredient	CAS No.	% by WT. Range	Exposure Limits
Butane	106-97-8	 50-100 	 800ppm TWA (NIOSH) 1000ppm TLV (ACGIH)
Isobutane	75-28-5	 25-50 	 800ppm TWA (NIOSH) 1000ppm TLV (ACGIH))
Propane	74-98-6	 2.5-10 	 1000ppm TLV (ACGIH) 1000ppm TWA (OSHA) 1000ppm TWA (NIOSH)

Key: (PEL) = Permissible Exposure Limit OSHA

(TLV) = Threshold Limit Value OSHA & ACGIH

(STEL) = Short Term Exposure Limit ACGIH

(WEEL) = USA. Workplace Environmental Exposure Levels

(TWA) = Time Weighted Average

CAS = Chemical Abstracts Registry Number

IDLH = Immediate Danger to Life and Health

N.E. =None Established

EXPOSURE GUIDELINES: Consider the potential hazards of this material (Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

ENGINEERING CONTROLS: Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

RESPIRATORY PROTECTION: For vapor concentrations 1 to 10 times TLV an air purifying NIOSH/MSHA Approved respirator with full face-piece and organic vapor cartridges. For concentrations over 10 times TLV and in confined areas use an NIOSH/MHSA approved positive pressure full face-piece supplied air respirator.

BODY CLOTHING: No protective equipment is needed under normal use conditions. However employees must wear appropriate protective (impervious) flame retardant antistatic clothing and equipment to prevent repeated or prolonged contact with this substance. Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse.

SKIN PROTECTION: Employees must wash hands before breaks and at the end of work. Employees must wear appropriate protective gloves to prevent contact with this substance. For full contact use Fluorinated Rubber Gloves and for Splash contact use Nitrile Rubber Gloves.

EYE/FACE PROTECTION: Employees should use safety eyewear e.g. tightly sealed goggles with face shield.

Emergency shower and eyewash should be easily accessible to the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE, COLOR AND ODOR: Butane Fuel is a compressed liquefied colorless gas with an odor like rotten eggs.

Odor Threshold> No data available pH
> No data available
Melting/Freezing Point> -137.99 °C (-216.38 °F) - Butane
Melting/Freezing Point> -160 °C (-256 °F) – Isobutane
Melting/Freezing Point> -188 °C (-306 °F) - Propane
Boiling Range> -11°C (12.2°F)
Density> 0.55g/cm @20°C
Vapor Pressure> 1820mmHg@25°C
Vapor Density (air=1)> 2.3 – Butane
Vapor Density (air=1)> 2.01 – Isobutane
Vapor Density (air=1)> 1.52 - Propane
Water Solubility> Not miscible
Partition Coefficient n-Octanol/Water- > log Pow 2.89 - Butane
Evaporation Rate (Butyl Acetate=1) > No data available
Flash Point> <0 °C (<32°F)
Upper Flammability Limit> 8.5% (V)
Lower Flammability Limit> 1.5% (V)
Auto-Ignition Temperature> 365°C (689°F)
Decomposition Temperature> No data available
Viscosity> No data available

Explosive Properties-----> Product is not explosive. However, formation of explosive air/vapor mixtures are possible. Oxidizing Properties------ No data available Other Information: No data Available 10. STABILITY AND REACTIVITY INFORMATION CHEMICAL STABILITY: Unstable () Stable (X) POSSIBILITY OF HAZARDOUS REACTIONS: Vapors may form explosive mixtures with air. **CONDITIONS TO AVOID:** Heat, Sparks, Pilot Lights, Static Electricity, and Open Flame. **INCOMPATIBLE MATERIALS:** No further relevant information is available. **HAZARDOUS DECOMPOSITION PRODUCTS**: No decomposition if used according to specifications. HAZARDOUS POLYMERIZATION: May occur () Will not occur (X) **TOXICOLOGICAL INFORMATION** Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x **ACUTE HEALTH EFFECTS:** Effects of overexposure: Eye> No irritating effect. Skin> No irritant effect. No sensitizing effects known. Inhalation> Burn product in a well ventilated area; Ingestion> Temporary symptoms. **ACUTE TOXICITY:** The effects of overexposure shown in Section II are based on acute toxicity profiles. Typical values are:

Ingredient | Oral LD50(Rat) | Skin LD50(Rabbit)|Inhalation LC50 |

Butane	N.D.	1	N.D.	658000mg/m3/4h
 sobutane 	N.D.		N.D.	N.D.
Propane	N.D.		N.D.	N.D.

N.D. - No data available

MUTAGENIC EFFECTS: No data available

CARCINOGEN STATUS: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP, OSHA or ACGIH.

REPRODUCTIVE TOXICITY: No data available

Specific target organ toxicity (STOT-SE)- single exposure (Globally Harmonized

System): no data available

Specific target organ toxicity (STOT-RE) - repeated exposure (Globally

Harmonized System): no data available

ASPIRATION HAZARD: No data available

ADDITIONAL INFORMATION: Central nervous system depression, giddiness, Shortness of breath, narcosis, Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite., Exposure can cause numbness, tingling, and weakness in extremities., Cyanosis, Pulmonary edema. Effects may be delayed., Abdominal pain, Nausea, Vomiting

12. ECOLOGICAL INFORMATION

Generally not hazardous for water.

AQUATIC TOXICITY: No further relevant information available.

WATERFOWL TOXICITY: No data available

PERSISTANCE AND DEGRADABILITY: No further relevant information available.

BIOACCUMULATION: Log Pow 2.89 - Butane

BIOCONCENTRATION FACTOR (BCF): No further relevant information available.\

BIOLOGICAL OXYGEN DEMAND (BOD): No further relevant information available.

FOOD CHAIN CONCENTRATION POTENTIAL: None noted

13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS: Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. Must not be disposed together with household garbage. Do not allow product to reach sewage system.

CONTAMINATED PACKAGING: Dispose of as unused product

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

14. TRANSPORT INFORMATION

USDOT Shipping Name------> PETROLEUM GASES, LIQUEFIED USDOT Hazard Classification---> 2.1 USDOT Label Codes-----> 2.1 USDOT ID Number----> UN1075 USDOT Package Code----> N/A Emergency Response Guide---> No

IMDG

UN number: 1075 Class: 2.1 Packing group: N/A EMS-No: F-D, S-U

Proper shipping name: PETROLEUM GASES, LIQUEFIED

Marine pollutant: No

IATA

UN number: 1075 Class: 2.1 Packing group: N/A

Proper shipping name: PETROLEUM GASES, LIQUEFIED

15. REGULATORY INFORMATION

SARA TITLE III (Superfund Amendment and Reauthorization Act)

SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355)- Not Listed

SECTION 313: Toxic Chemicals Listing (40 CFR 372.65)- Not Listed

SECTION 311/312: Hazard Categorization (40 CFR 370)- Fire, Sudden Release of Pressure, Chronic Health Hazard

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)

SECTION 102(A) Hazardous Substances (40 CFR 302.4)- Not Listed

SECTION 101(14) Reportable Quantity: None

Massachusetts Right To Know Components
Butane CAS 106-97-8
Isobutane CAS 75-28-5
Propane CAS 74-98-6
Pennsylvania Right To Know Components
Butane CAS 106-97-8
Isobutane CAS 75-28-5
Propane CAS 74-98-6

New Jersey Right To Know Components Butane CAS 106-97-8 Isobutane CAS 75-28-5 Propane CAS 74-98-6

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA (Toxic Substance Control Act)

Butane CAS 106-97-8, Isobutane CAS 75-28-5, Propane CAS 74-98-6 are listed on the TSCA Inventory.

16. OTHER INFORMATION:

HMIS (Hazardous Materials Identification System)

Hazard Rating:

4-Extreme

3-High

2-Moderate

1-Slight

0-

Insignificant

NFPA RATINGS (SCALE 0-4):

Health=0 Fire=4

Reactivity=0

HMIS RATINGS (SCALE 0-4)

Health=0 Fire=4

Reactivity=0 PPE=G

Basis for Classification This substance is classified based on Directive (REACH) 1272/2008/EC and its amendments (CLP Regulation, GHS) Symbol(s)

F Extremely Flammable Risk Phrases R12 Extremely flammable

GHS Hazard Statements:

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

Date of preparation----> June 9, 2015

Revision Number----> 1.0

Revision Date-----> June 9, 2015

Prepared by-----> T.G. Fenstermaker, Jr.

Acronyms:

ACGIH - American Conference of Governmental Industrial Hygenists

ADR - Accord européen sur le transport des marchandises dangereuses parRoute

(European Agreement concerning the International Carriage of Dangerous Goods

by Road)

AIHA - American Industrial Hygiene Association

ANSI - American Nation Standards Institute

API - American Petroleum Institute

CERCLA - Comprehensive Emergency Response, Compensation, and Liability Act

DOT - U.S. Department of Transportation

EPA - U.S. Environmental Protection Agency

GHS - Globally Harmonized System of Classification and Labelling of Chemicals

HMIS - Hazardous Materials Information System

IARC - International Agency For Research On Cancer

IATA - International Air Transport Association

IMDG - International Maritime Code for Dangerous Goods

MSHA - Mine Safety and Health Administration
NFPA - National Fire Protection Association

NIOSH - National Institute of Occupational Safety and Health

NOIC - Notice of Intended Change (Proposed change to ACGIH TLV)

NTP - National Toxicology Program
OPA - Oil Pollution Act of 1990

OSHA - U.S. Occupational Safety & Health Administration

PEL - Permissible Exposure Limit (OSHA)

RCRA - Resource Conservation and Recovery Act
REL - Recommended Exposure Limit (NIOSH)

SARA - Superfund Amendments and Reauthorization Act of 1986 Title III

SCBA - Self-Contained Breathing Apparatus

STEL - Short-Term Exposure Limit (generally 15 minutes)

TLV - Threshold Limit Value

TSCA - Toxic Substances Control Act
TWA - Time Weighted Average (8hr.)

WHMIS - Canadian Workplace Hazardous Materials Information System

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for any use and the manner of use contemplated. User must meet all applicable safety and health standards.