1 Identification

- Product identifier
  - Trade name: **SOLDER-IT™ Iroda Brand Butane** – Part # BU-5, CF-30C
  - Article number: No other identifiers
- Recommended use and restriction on use
  - Recommended use: Fuel
  - Restrictions on use: See Sections 8 and 10 for further information.
- Details of the supplier of the Safety Data Sheet
  - Manufacturer/Supplier:
    - SOLDER-IT, INC.
    - 404 Irvington Street
    - Pleasantville, NY 10570
    - 914-747-1092
  - Emergency telephone number:
    - ChemTel Inc.
    - (800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

- Classification of the substance or mixture
  - GHS02 Flame
    - Flam. Gas 1 H220 Extremely flammable gas.
  - GHS04 Gas cylinder
    - Press. Gas H280 Contains gas under pressure; may explode if heated.
- Additional information:
  - There are no other hazards not otherwise classified that have been identified.
  - 0 percent of the mixture consists of ingredient(s) of unknown toxicity.

- Label elements
- GHS label elements
  - The product is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms
  - GHS02 GHS04
- Signal word Danger
- Hazard statements
  - H220 Extremely flammable gas.
  - H280 Contains gas under pressure; may explode if heated.
- Precautionary statements
  - P210 Keep away from heat, sparks, open flames, and hot surfaces. - No smoking.
  - P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

(Contd. on page 2)
Trade name SOLDER-IT™ Iroda Brand Butane Part # BU-5, CF-30C

- P381 Eliminate all ignition sources if safe to do so.
- P410+P403 Protect from sunlight. Store in a well-ventilated place.

- **Hazard description:**
  - **WHMIS-symbols:**
    As of 11 February 2015, the current WHMIS system is being replaced by the GHS system. This is the classification under the older system.
    - A - Compressed gas
    - B1 - Flammable gas

- **Classification system:**
  - **NFPA ratings (scale 0 - 4)**
    - Health = 0
    - Fire = 4
    - Reactivity = 0
  - **HMIS-ratings (scale 0 - 4)**
    - HEALTH    Health = 0
    - FIRE      Fire = 4
    - REACTIVITY Reactivity = 0

- **Other hazards**
  - **Results of PBT and vPvB assessment**
    - PBT: Not applicable.
    - vPvB: Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Dangerous components</th>
<th>Identity</th>
<th>Health hazard</th>
<th>Reactivity hazard</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-28-5 isobutane</td>
<td></td>
<td></td>
<td></td>
<td>60-80%</td>
</tr>
</tbody>
</table>

- **Additional information:**
  For the listed ingredients, the identity and exact percentages are being withheld as a trade secret.

### 4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
Safety Data Sheet  
acc. to OSHA HCS (29 CFR 1910.1200)

Trade name: SOLDER-IT Iroda Brand Butane Part # BU-5, CF-30C

- **After skin contact:**  
  In cases of frostbite, rinse with plenty of water. Do not remove clothing.  
  If skin irritation is experienced, consult a doctor.

- **After eye contact:**  
  Remove contact lenses if worn.  
  Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- **After swallowing:**  
  Unlikely route of exposure.  
  Do not induce vomiting; immediately call for medical help.

- **Information for doctor:**
  - **Most important symptoms and effects, both acute and delayed**
    - Dizziness
    - Disorientation
  - **Danger**
    No further relevant information available.
  - **Indication of any immediate medical attention and special treatment needed**
    If necessary oxygen respiration treatment.  
    Treat frost-bitten areas appropriately.

### 5 Fire-fighting measures

- **Extinguishing media**
  - **Suitable extinguishing agents:** In case of fire: Use foam, powder, or carbon dioxide for extinction.

- **For safety reasons unsuitable extinguishing agents:** Water stream.

- **Special hazards arising from the substance or mixture**
  - Danger of receptacles bursting because of high vapor pressure if heated.

- **Advice for firefighters**
  - **Protective equipment:**
    Wear self-contained respiratory protective device.
    Wear fully protective suit.

- **Additional information**
  - Eliminate all ignition sources if safe to do so.
  - Cool endangered receptacles with water fog.
  - In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
  - Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  - Wear protective equipment. Keep unprotected persons away.
  - Ensure adequate ventilation.
  - Keep away from ignition sources.
  - Protect from heat.

- **Environmental precautions:** For large spills, suppress gases/fumes/haze with water fog.

- **Methods and material for containment and cleaning up:**
  - Ensure adequate ventilation.
  - Do not flush with water or aqueous cleansing agents
  - Send for recovery or disposal in suitable receptacles.

(Contd. on page 4)
Trade name: SOLDER-IT Butane Part # BU-5, CF-30C

7 Handling and storage

- Handling:
  - Precautions for safe handling
    - Keep away from heat and direct sunlight.
    - Open and handle receptacle with care.
    - Use only in well ventilated areas.
    - Keep receptacles tightly sealed.
    - Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
  - Information about protection against explosions and fires:
    - Keep ignition sources away - Do not smoke.
    - Protect from heat.
    - Protect against electrostatic charges.
    - Emergency cooling must be available in case of nearby fire.
    - Pressurized container: protect from sunlight and do not expose to temperatures exceeding 120 °F / 49 °C, i.e. electric lights. Do not pierce or burn, even after use.
    - Fumes can combine with air to form an explosive mixture.
    - Do not spray on a naked flame or any incandescent material.

- Conditions for safe storage, including any incompatibilities
  - Storage:
    - Requirements to be met by storerooms and receptacles:
      - Store in a cool location.
      - Observe official regulations on storing packagings with pressurized containers.
    - Information about storage in one common storage facility:
      - Store away from foodstuffs.
      - Store away from oxidizing agents.
  - Further information about storage conditions:
    - Store in cool, dry conditions in well-sealed receptacles.
    - Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
    - Protect from heat and direct sunlight.
  - Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.

- Control parameters
  - Components with limit values that require monitoring at the workplace:
    - 75-28-5 isobutane
      - TLV (USA) Short-term value: 2370 mg/m³, 1000 ppm
      - EV (Canada) Long-term value: 800 ppm
Trade name: SOLDER-IT Butane Part # BU-5, CF-30C

<table>
<thead>
<tr>
<th>LMPE (Mexico)</th>
<th>Long-term value: 1000 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>106-97-8 butane</td>
<td></td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 1900 mg/m³, 800 ppm</td>
</tr>
<tr>
<td></td>
<td>Short-term value: 2370 mg/m³, 1000 ppm</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Short-term value: 750 ppm</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 600 ppm</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Long-term value: 800 ppm</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 1000 ppm</td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td></td>
</tr>
</tbody>
</table>

- **Additional information**: The lists that were valid during the creation were used as basis.
  - **Exposure controls**
  - **Personal protective equipment**:
    - **General protective and hygienic measures**: The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
  - **Engineering controls**: No further relevant information available.
  - **Breathing equipment**: Not required under normal conditions of use. Use suitable respiratory protective device in case of insufficient ventilation.
  - **Protection of hands**: Gloves not required under normal conditions of use. Wear protective gloves to handle contents of damaged or leaking units. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - **Eye protection**: Safety glasses
    Follow OSHA or EU guidelines concerning the use of protective eyewear.
  - **Body protection**: Not required under normal conditions of use.
  - **Limitation and supervision of exposure into the environment** No further relevant information available.

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**9 Physical and chemical properties**

- **Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance**:
    - **Form**: Compressed gas
    - **Color**: Colorless
  - **Odor**: Odorless
  - **Odor threshold**: Not determined.
  - **pH-value**: Not determined.

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Trade name: SOLDER-IT Butane Part # BU-5, CF-30C

- Change in condition
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: -11 °C (12 °F)
- Flash point: -60 °C (-76 °F)
- Flammability (solid, gaseous): Extremely flammable liquefied gas.
- Auto-ignition temperature: 365 °C (689 °F)
- Decomposition temperature: Not determined.
- Auto igniting: Product is not self-igniting.
- Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- Explosion limits:
  - Lower: 1.5 Vol %
  - Upper: 8.5 Vol %
- Vapor pressure at 20 °C (68 °F): 3000 hPa (2250 mm Hg)
- Density at 20 °C (68 °F): 0.41 g/cm³ (3.421 lbs/gal)
- Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: Not applicable.
- Solubility in / Miscibility with Water: Not miscible or difficult to mix.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- Other information: No further relevant information available.

10 Stability and reactivity

- Reactivity
- Chemical stability
- Thermal decomposition / conditions to be avoided:
  Danger of receptacles bursting because of high vapor pressure if heated.
  Pressurized container: Do not pierce or burn, even after use.
- Possibility of hazardous reactions
  - Develops readily flammable gases / fumes.
  - Flammable.
  - Reacts with oxidizing agents.
  - Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
- Conditions to avoid
  Keep ignition sources away - Do not smoke.
  Store away from oxidizing agents.
### 11 Toxicological information

- **Incompatible materials:** No further relevant information available.

#### 11.1 Information on toxicological effects

- **Acute toxicity:**
  - **LD/LC50 values that are relevant for classification:** None.

- **Primary irritant effect:**
  - **on the skin:** No irritant effect.
  - **on the eye:** No irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Subacute to chronic toxicity:** No further relevant information available.

- **Additional toxicological information:** Asphyxiant gas.
  - Inhalation of concentrated vapors as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

- **Carcinogenic categories**
  - **NTP (National Toxicology Program):** None of the ingredients is listed.
  - **OSHA-Ca (Occupational Safety & Health Administration):** None of the ingredients is listed.

- **Probable Routes of Exposure**
  - Inhalation.
  - Eye contact.
  - Skin contact.

- **Acute effects (acute toxicity, irritation and corrosivity):** May cause drowsiness or dizziness.

- **Repeated Dose Toxicity:** No further relevant information available.

### 12 Ecological information

- **Toxicity**
  - **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability:** No further relevant information available.

- **Behavior in environmental systems:**
  - **Bioaccumulative potential:** No further relevant information available.
  - **Mobility in soil:** No further relevant information available.

- **Additional ecological information:**

- **General notes:**
  - Avoid emission into atmosphere. Product shows a high atmospheric residence time and is justified suspected to influence the O2/O3 balance in the stratosphere.
  - Generally not hazardous for water.

- **Other adverse effects:** No further relevant information available.
13 Disposal considerations

- Waste treatment methods
  - Recommendation:
    Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
    The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
- DOT, ADR, IMDG, IATA
- UN proper shipping name: UN2037

- DOT
  - Receptacles, small, containing gas (Gas cartridges)

- ADR
  - 2037 RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)

- IMDG
  - RECEPCTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)

- IATA

- Transport hazard class(es)
  - DOT
    - Class 2 Gases
    - Label 2.1

  - ADR
    - Class 2 5F Gases
    - Label 2.1

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Trade name: SOLDER-IT Butane Part # BU-5, CF-30C

- IMDG, IATA

  - Class: 2 Gases
  - Label: 2.1
  - DOT, ADR, IMDG, IATA: Not Regulated
  - Environmental hazards: No
  - Special precautions for user: Warning: Gases
  - EMS Number: F-D-S-U
  - Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

- Transport/Additional information:
  - ADR
    - Excepted quantities (EQ): Code: E0 Not permitted as Excepted Quantity
  - IMDG
    - Excepted quantities (EQ): Code: E0 Not permitted as Excepted Quantity
  - UN "Model Regulation": UN2037, Receptacles, small, containing gas (Gas cartridges), 2.1

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- SARA

  - Section 355 (extremely hazardous substances):
    None of the ingredients is listed.
  - Section 313 (Specific toxic chemical listings):
    None of the ingredients are listed.
  - TSCA (Toxic Substances Control Act):
    All ingredients are listed.

- Proposition 65 (California)

  - Chemicals known to cause cancer:
    None of the ingredients are listed.
  - Chemicals known to cause reproductive toxicity for females:
    None of the ingredients are listed.
  - Chemicals known to cause reproductive toxicity for males:
    None of the ingredients is listed.
Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

Carcinogenic categories

- EPA (Environmental Protection Agency)
  None of the ingredients is listed.
- IARC (International Agency for Research on Cancer)
  None of the ingredients is listed.
- TLV (Threshold Limit Value established by ACGIH)
  None of the ingredients is listed.
- NIOSH-Ca (National Institute for Occupational Safety and Health)
  None of the ingredients is listed.
- State Right to Know Listings
  None of the ingredients is listed.

Canadian substance listings:

- Canadian Domestic Substances List (DSL)
  All ingredients are listed.
- Canadian Ingredient Disclosure list (limit 0.1%)
  None of the ingredients is listed.
- Canadian Ingredient Disclosure list (limit 1%)
  106-97-8 butane

Other regulations, limitations and prohibitive regulations
This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Date of preparation / last revision 05/20/2015 / -

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
<table>
<thead>
<tr>
<th><strong>Trade name:</strong> SOLDER-IT Butane Part # BU-5, CF-30C</th>
</tr>
</thead>
</table>

- **Flam. Gas 1:** Flammable gases, Hazard Category 1
- **Press. Gas:** Gases under pressure: Compressed gas

**Sources**

SDS Prepared by:
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Website: www.chemtelinc.com

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