

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE PREPARATION

Product name: Utility Lighter/BBQ Lighter

HS Code: 96138 00000

Product type / recommended uses: fire ignition in kitchen or outdoors
barbecue(with gas under pressure)

2. Hazards identification

Human health hazards: Danger symbol not required.

Note:

In concentrations higher than 10%: weakness, headache, nausea, dizziness, confusion, blurred sight, increasing sleepiness. Very high concentrations may cause unconsciousness, and finally asphyxia caused by the absence of oxygen. High evaporation rate of the liquid may lead to frostbites.

Safety hazards: Extremely flammable

Environmental hazards: Danger symbol not required.

Precaution Statement:



- (1). Extremely flammable gas.
- (2). Contains gas under pressure; may explode if heated.
- (3). Keep away from heat/sparks/open flames/hot surfaces. ---- No smoking
- (4). Leaking gas fire: Do not extinguish unless leak can be stopped safely.
- (5). Eliminate all ignition sources if safe to do so.
- (6). Store in a well-ventilated place.
- (7). Protect from sunlight.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical description: 98% pure butane. Other mixed organic materials.

Ingredients / Hazardous components:

Chemical Name CAS# Molecular Formula Percentage

Ethane 74-84-0 C₂H₆ 1.0461%
Propane 74-98-6 C₃H₈ 18.2702%
Iso-butane 75-28-5 C₄H₁₀ 60.9816%
n-butane 106-97-8 C₄H₁₀ 19.2916%
n-butane 115-11-7 C₄H₈ 0.1538%
Trans-butane 107-01-7 C₄H₈ 0.1392%
Cis-butane 107-01-7 C₄H₈ 0.0954%
Pentane 109-66-0 C₅H₁₂ 0.0172%

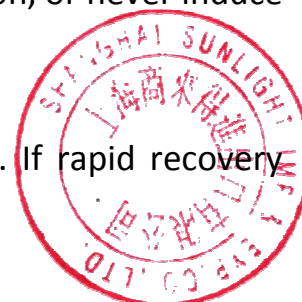
4. FIRST AID MEASURES

General information:

Never give anything by mouth to an unconscious person, or never induce vomiting.

Inhalation: Remove the affected person to fresh air. If rapid recovery does not occur obtain medical attention.

Skin contact: Wash skin with large amounts of water, use soap. Get



medical attention.

Eye contact: Flush eyes with plenty of water for 10-15 minutes. Get medical attention immediately.

Ingestion: If swallowed, give water. Do not induce vomiting. Get medical attention.

5. FIRE-FIGHTING MEASURES

Fire hazards:

Extremely flammable under pressure

Suitable extinguishing media:

Dry chemical powder, foam, carbon dioxide or sand.

Unsuitable extinguishing media:

Water Jet

Further information:

Being heavier than air, gases may accumulate in lower and or confined spaces when released. Dilute gases with water spray.

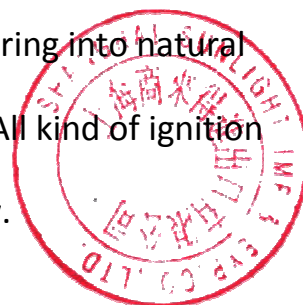
6. ACCIDENTAL RELEASE MEASURES

Personal precautions: See Section 8.

Environmental precautions: Prevent spills from entering into natural water or air, soil and drains by containing the liquid. All kind of ignition sources should be removed Notify relevant authority.

Clean-up procedures / recovery

On air: Dilute butane gas with water immediately, it is easy to be volatile



On soil: All kind of ignition sources should be removed.

On water: Notify local authorities according to regulations.

7. HANDLING AND STORAGE

Handling:

Use natural or artificial ventilation.

Keep away from radiant heat and open flame.

Keep general measures applied for normal operations with flammable materials. When using, do not smoke.

Handling temperature:

Storage: Be loaded by special dangerous goods containers with goods not inverted, train and sun. Storage temperature: max. 40° C

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering control measures:

Not required.

Personal protection:

Respiratory protection: Breathing apparatus not required. If there is a hazard of overexposure to high gas concentrations, use self – contained breathing apparatus.

Hand protection: Gloves protecting against frostbites and resistant to the substance

Eye protection: Protective goggles not required.

Skin protection: Protective clothing.



Other special: /

General protective measures / hygiene:

Container under pressure, DO NOT try to open, knock, or pierce the container, keep it protected from sun rays and do not expose to more than 50° C. Do not spray over flame or incandescent material. Keep away from sources of ignition. No smoking.

Keep out of reach of children

Environmental exposure controls: /

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Physical state:	Gas
Colour:	colorless
Odour:	characteristic

Change in physical state:

Melting point:	typ. -13536°C
Boiling point:	typ.-05°C

Others:

Flash point (COC) (EN ISO 2592):	Not available
Ignition point (EN ISO 2592):	not available
Autoignition temperature:	not available
Explosive limited:	The air with gas mixture explosion floor to 19%-84%(9)

Oxidizing properties:

Critical pressure at 20°C:	Not available
Relative Density at 25°C:	Kp380
Solubility:	typ. 0.5730,boiling point -05°C practically insoluble in ethanol, aether, chloroform and other hydrocarbon

Solubility in other solvents:

n-Octanol/water partition coefficient:	gasoline, kerosene, toluene, etc.
Vapour density:	not available

Evaporation rate:

Heating value:	not available
Kinematic viscosity at 40°C (EN ISO 3104):	not applicable
Kinematic viscosity at 100°C (EN ISO 3104):	Not applicable
pH:	not applicable

10. STABILITY AND REACTIVITY

Stability: No decomposition and volatility if stored and handled properly.



Conditions to avoid: Direct heat or ignition sources.

Materials to avoid: Strong oxidizing agents.

Hazardous decomposition products: On burning, carbon monoxide, carbon dioxide, hydrocarbons can be formed.

Notes: /

11. TOXICOLOGICAL INFORMATION

Acute toxicity: no toxicity

Sensitization: /

Chronic toxicity: not known

Other information, specific effects: /

12. ECOLOGICAL INFORMATION

Mobility: volatile in the air

Degradability / persistence: /

Biodegradability: /

Bio-accumulative potential: /

Eco-toxicity: not available

Biological oxygen demand: /

Chemical oxygen demand: /

Environmental effects: /

13. DISPOSAL CONSIDERATIONS

Product disposal:

Wastes of the product or used oil should be treated as hazardous waste.



EWC cod: 13 02 05*

Mineral-based non-chlorinated engine, gear and lubricating oils.

Disposal must be in compliance with national and local regulations.

Packaging disposal:

Containers with product residue should also be treated as hazardous waste according to national and local disposal regulations.

EWC cod: 15 01 10*

Packaging containing residues of or contaminated by dangerous substances.

Disposal must be in compliance with national and local regulations.

Waste:

Quality of wastewater emitted to natural water must comply with national and local regulations.

Care should be taken in any case to ensure compliance with EC, national and local regulations. It is the responsibility of the user to know all relevant national and local regulations.



14. TRANSPORT INFORMATION

	Land Transport (ADR/RID)	Sea Transport (IMDG)	Air Transport (ICAO/IATA)
UN Number	1057	1057	1057
UN Proper Shipping Name	Lighter refills containing flammable gas	Lighter refills containing flammable gas	Lighter refills containing flammable gas
Transport Hazard Class	2.1	2.1	2.1
Packaging Group	Not regulated	Not regulated	Not regulated
Environmental Hazards	No	No	No
Special Precautions for User	See Section 2	See Section 2	See Section 2
Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated	Not regulated	Not regulated

15. REGULATORY INFORMATION

Classification and labeling according to EU directives [67/548/EEC and 88/379/EEC, 1999/45/EC (existing versions)] for hazardous substances and hazardous preparations:

Danger symbol(s) and indication(s) in outer carton:



Hazardous substance(s): butane 98%

The packaging must bear the inscription:

R-phrases: R 12 Extremely flammable



S-phrases: S 2 Keep out of the reach of children



S 24 Avoid contact with skin

S-60 Do not expose to temperature above than 50 degree

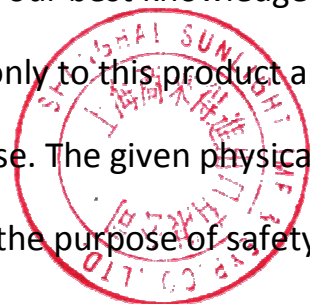
Tactile warning of danger: In case of distribution for population



16. OTHER INFORMATION

Recommended application / restrictions: See product sheets.

The information given in this data sheet is based on our best knowledge at the time of publication. The information is related only to this product and is intended to assist its safe transport, handling and use. The given physical and chemical parameters describe the product only for the purpose of safety



requirements and therefore should not be construed as guaranteeing any specific property of the product or as being part of a product specification or any contract. The manufacturer or supplier shall not take responsibility for any damages from the use other than recommended or other misuse of the product. It is the responsibility of the user to keep regulatory precautions and observe recommendations for safe use of the product.

Remarks:

UN number: 1057, Class: 2.1, Page: 2154, Flash point: 55°C,

Packing

Code: 4G, EMS code: F-D/S-U

Disclaimer

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be constructed as guaranteeing any specific property of the products.

