

MATERIAL SAFETY DATA SHEET	Page : 1
	Version : 5
MULTI-PURPOSE LIGHTER	Date : 30/11/2006
	Supersedes : 7/3/2006
	BIC

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : BIC MEGALIGHTER
Product code : U110, U120, U140
* Recommended uses : Flame-producing device mostly used to ignite chimney fires, barbecues, candles and gas stoves
Misuse may cause serious injury
Refer to safety symbols or to instructions and warnings on packaging before use :
"Keep away from children"
"Ignite utility lighter away from face and clothing"
"Do not use to light cigarettes, cigars, or pipes"
"Be sure flame is completely out after each use"
"Never expose to heat above 50°C or to prolonged sunlight"
"Never puncture or put in fire"
"Follow all instructions and warnings provided by grill or other appliance manufacturer when using this product"
"Do not keep lit for more than 30 seconds"
"Contains flammable gas under pressure"
Each individual lighter conforms to ISO 22702
This list of information is not exhaustive

SUPPLIER :
Name : SOCIETE DU BRIQUET JETABLE 75 - "BJ 75"
Address : 14, Rue Jeanne d'Asnières
92611 CLICHY Cédex
FRANCE

Telephone number : + 33 02 99 71 21 60
Telefax number : +33 02 99 71 38 82
EMERGENCY TELEPHONE NUMBER : ORFILA (France) : +33 01 45 42 59 59

2. COMPOSITION / INFORMATION ON INGREDIENTS

ARTICLE : Multi-purpose lighter
Thermoplastic casing with liquefied hydrocarbon fuel mixture

Components contributing to the hazard :

Substance name	Contents	CAS No / EC No / Index No	Symbol(s)	R-Phrase(s)
<u>Isobutane mixture (type A50)</u>	100 %	75-28-5 / 200-857-2 / 601-004-00-0	F+	12
Further information :	The main components of the lighter's body are high molecular weight polymers : - Polyoxymethylene (CAS : 25231-38-3) Residual formaldehyde content in polymer : < 50 ppm - Polyamide 66 thermoplastic (Nylon) (CAS : 32131-17-2) - Acrylonitrile Butadiene Styrene (ABS) and Styrene Acrylonitrile (SAN) copolymer			

3. HAZARDS IDENTIFICATION

MOST IMPORTANT HAZARDS :

Adverse human health effects : Gas lighters when used normally do not present a health hazard

Further data : Isobutane mixture (type A50) :
Presents narcotic effects
Gas is heavier than air. May accumulate in low areas

Physical and chemical hazards :

- Fire or explosion : Extremely flammable liquefied gas
May form flammable/explosive vapour-air mixtures
Intense accidental overheating (for example in case of fire) may create rupture of its reservoir and, in certain conditions, may lead to the ignition of the gas

- Further hazards : Risk of rupture of individual lighters when submitted to abnormal impact

Classification of the product : According to EC regulations, this product is not classified as a "hazardous preparation".

MATERIAL SAFETY DATA SHEET

MULTI-PURPOSE LIGHTER

Page : 2

Version : 5

Date : 30/11/2006

Supersedes : 7/3/2006

BIC

4. FIRST AID MEASURES

Inhalation :	In the event of exposure to high concentrations of gas or combustion fumes from reservoirs : Move the affected person away from the contaminated area and into the fresh air Consult a doctor if necessary
Skin contact :	Plastic casing : In case of contact with molten polymer, cool skin rapidly with cold water. Do not peel polymer from the skin Isobutane mixture (type A50) : In the event of contact with the liquid: treat resulting frostbite as a burn
Eye contact :	Rinse immediately and thoroughly with plenty of water whilst keeping the eyes wide open (at least 15 minutes) Consult an eye specialist immediately
Ingestion :	Not specifically applicable (gas)

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media :	Carbon dioxide (CO ₂) Foam Powders Water
Specific hazards :	Intense accidental overheating may create rupture of its reservoir and, in certain conditions, may lead to the ignition of the gas An explosion hazard exists on heating Polyoxymethylene burns with colourless flame and may release formaldehyde vapors Dangerous vapors (NH ₃ , HCN) may be released by combustion of polyamid 66 ABS/SAN copolymer may release toxic vapors by combustion, or dense black smoke when combustion is not complete
Protection of fire-fighters :	Self-contained breathing apparatus

6. ACCIDENTAL RELEASE MEASURES

Personal precautions :	No flames, no sparks. Eliminate all sources of ignition.
Environmental precautions :	No particular/specific measures required
Methods for cleaning up :	
- Disposal :	Dispose of materials or solid residues at an authorized site

7. HANDLING AND STORAGE

HANDLING

Technical measures :	Does not require any specific or particular technical measures
Precautions :	Avoid high temperatures

STORAGE

Technical measures :	Provide appropriate exhaust ventilation in storage places
----------------------	---

Storage conditions :

- Recommended :	Store : - away from any source of ignition - in a cool and dry area (10-40 °C, 30-70% HR)
- To be avoided :	Avoid the storage of lighters close to highly flammable materials
Incompatible materials :	Strong oxidizing agents
Packaging materials :	
- Recommended :	Original packaging
- Not suitable :	None, to our knowledge

MATERIAL SAFETY DATA SHEET

MULTI-PURPOSE LIGHTER

Page : 3

Version : 5

Date : 30/11/2006

Supersedes : 7/3/2006

BIC

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures :	Ensure good ventilation of the work station
Occupational exposure limits :	
- France :	Isobutane mixture (type A50) : Isobutane : No specific limit Butane : VME : 1900 mg/m ³ (800 ppm) Propane : No specific limit
- Germany :	Isobutane mixture (type A50) : Isobutane : MAK value: 2400 mg/m ³ (1000 ppm) Butane : MAK value: 2400 mg/m ³ (1000 ppm) Propane : MAK value: 1800 mg/m ³ (1000 ppm)
- USA (ACGIH) :	Isobutane mixture (type A50) : Isobutane : No specific limit Butane : TLV (TWA) = 800 ppm Propane : TLV (TWA) = 2500 ppm
Personal protective equipment :	No specific/particular measures required for this product. Comply with good occupational hygiene practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state :	Liquefied gas
Colour :	colourless
Odour :	hydrocarbons
pH :	Not applicable
Specific temperatures :	
- Melting :	- Polyoxymethylene (Acétal) : 172 °C - Polyamide 66 (Nylon) : 254 °C
- Boiling :	Isobutane mixture (type A50) : -19 °C
Flammability characteristics :	
- Flash point :	Isobutane mixture (type A50) : -89 °C
- Auto-ignition temperature :	Isobutane : > 420 °C (1.013 bar) Propane : > 480 °C (1.013 bar)
Explosive limits in air :	Isobutane mixture (type A50) :
- Lower :	1.8 % (volume)
- Upper :	9.6 % (volume)
Vapour pressure :	Isobutane mixture (type A50) : 3.4 bar (21 °C)
Vapour density (air = 1) :	Isobutane mixture (type A50) : 1.8884 (15.5 °C)
Relative density (water = 1) :	Isobutane mixture (type A50) : 0.5626 (15.5 °C)
Solubility :	
- in water :	Isobutane mixture (type A50) : Very slightly soluble Polymers : Insoluble
Evaporation rate :	Isobutane mixture (type A50) : immediate

10. STABILITY AND REACTIVITY

Stability :	Stable at ambient temperature and under normal conditions of use
Hazardous reactions :	
- Conditions to avoid :	May explode or ignite : - on contact with hot surfaces or flames - above 50 °C
- Materials to avoid :	Isobutane mixture (type A50) : Reacts violently with : - strong oxidizing agents
- Hazardous decomposition products :	On combustion or on thermal decomposition (pyrolysis) releases : toxic fumes (H ₂ CO, NH ₃ , HCN...)

MATERIAL SAFETY DATA SHEET

MULTI-PURPOSE LIGHTER

Page : 4

Version : 5

Date : 30/11/2006

Supersedes : 7/3/2006

BIC

11. TOXICOLOGICAL INFORMATION

Acute toxicity :	Isobutane : No health effects were seen in humans exposed at 1000 ppm for up to 8 hours Can have central nervous system and asphyxiant effects at high concentrations (well above the lower explosion limit in air, 18000 ppm) (published data)
Local effects :	Isobutane mixture (type A50) : The gas is not irritating to the skin and to the eyes Rapid evaporation of the liquid may cause frostbite. Irreversible damage may result in severe cases
Chronic/long term toxicity :	Isobutane : No adverse effects have been reported from repeated or prolonged exposure
Specific effects :	
- Mutagenicity :	Isobutane : inactive during in vitro genotoxicity tests (published data)

12. ECOLOGICAL INFORMATION

MOBILITY :	
Destination of the product :	Isobutane mixture (type A50) : Air : 100 %
BIOACCUMULATION :	
Octanol/water partition coefficient :	Isobutane : 2.7 (log POW) (published data) Not potentially bioaccumulable

13. DISPOSAL CONSIDERATIONS

WASTE FROM PRODUCT :	
Destruction/Disposal :	Conform to current legislation, regulations and orders
NOTE :	The user's attention is drawn to the possible existence of specific european, national or local regulations regarding disposal

14. TRANSPORT INFORMATION

INTERNATIONAL REGULATIONS :	
- UN No.	1057
Land transportation :	
- Rail/road (RID/ADR) :	Class : 2 Classification code : 6F Packing group : - Hazard identification number : - Labelling : 2.1
Sea (IMO/IMDG) :	Class : 2.1 Packing group : - Emergency schedule (EmS) : F-D, S-U Labelling : 2
Air (ICAO-IATA) :	Class : 2.1 Packing group : - Labelling : Flammable gas Passenger aircraft : Packing instruction : 201 Quantity : 1 kg Cargo aircraft : Packing instruction : 201 Quantity : 15 kg
NOTE :	The above regulatory prescriptions are those valid on the date of publication of this sheet Given the possible evolution of transport regulations for hazardous materials, in case the present sheet is dating back to more than 12 months ago, it would be advisable to check their validity with your commercial agency

MATERIAL SAFETY DATA SHEET	Page : 5
	Version : 5
MULTI-PURPOSE LIGHTER	Date : 30/11/2006
	Supersedes : 7/3/2006
	BIC

15. REGULATORY INFORMATION

EC LABELLING :

- Symbols and indications of danger : No symbol
- R phrases : No R phrase
- S phrases : Gas contained in the lighter :
S2 : Keep out of the reach of children.
S15 : Keep away from heat.

The regulatory information given above only indicate the principal regulations specifically applicable to the product described in the MSDS The user's attention is drawn to the possible existence of additional provisions which complete these regulations Refer to all applicable international, national and local regulations or provisions

16. OTHER INFORMATION

- Restrictions on use : This product must not be used for other applications that mentioned in §1.
- * Update : This sheet was updated (refer to the date at the top of this page)
Texts which have been modified since the previous version are marked with an asterisk (*)
- Safety data sheet established by : LISAM SERVICES - TELEGIS
6 rue des Boucheries F-60400 NOYON
www.telegis.com

This sheet complements the technical sheets but does not replace them. The information given is based on our knowledge of the product, at the time of publication. It is given in good faith.

Besides, the attention of the user is drawn to the possible risk incurred by using the product for any other use than that for which it was intended.

In no way does this exempt the user from knowing and applying all the regulations controlling his activity. He alone will take on the responsibility for taking the precautions involved by the use of the product.

The aim of all the mandatory regulations mentioned is just to help the user to fulfil his obligations regarding the use of hazardous products.

This information must not be considered exhaustive. It does not exempt the user from ensuring that other obligations than those mentioned could apply, related to the storage and use of the product, this being his sole responsibility.

End of document