Material Safety Data Sheet

1 Identification of substance

- **Product details:** Lighter
- **Trade name:** Cigarette lighter
- Application of the substance: Igniting cigarette or cigar
- Manufacturer/Supplier:

2 Composition/Data on components

- Chemical characterization
- **Description:** Liquefied petroleum gas
- **Dangerous components:** Butane gas

3 Hazards identification

- Hazard designation: Irritant. Not dangerous for the environment.
- Information pertaining to particular dangers for man and environment: May cause fire if not use properly.
- Classification system: May not cause the environmental hazard.

4 First aid measures

- General information
- After inhalation: Remove the victim to fresh air. Seek medical treatment in case of symptoms.
- After skin contact: Flush with plenty of water in case skin becomes irritated.
- After eye contact: Rinse opened eye for several minutes under running water. Contact doctor.
- After swallowing: Do not induce vomiting. Call for medical help.
- Information for doctor: Cause vomit if ingesting, may be toxicosis. Skin becomes irritated.

(Continued on page 2)

Trade name: Cigarette lighter

5 Fire fighting measures

- Suitable extinguishing agents: Water spray jet, extinguishing powder, CO2, foam.
- Unsuitable extinguishing agents for reasons of safety: None.
- Special hazards caused by the material, its products of combustion or flue gases: Burning plastic parts may cause toxic gases.
- **Protective equipment:** Wear self-contained breathing apparatus.

6 Accidental release measures

- **Personal safety precautions:** Keep away from the face as igniting.
- Measures for environmental protection: Treat it as common plastic item.
- Measures for cleaning/collecting: Do not incinerate.

7 Handling and storage

- Handling
- Information for safe handling:

Contain butane gas under pressure, extremely flammable. Do not puncture, incinerate or expose to extremely heat. Hold away from face while igniting. Be sure flame is extinguished after use. Keep out of reach of children.

- Information about protection against explosion and fire: Keep away from open flames. Do not display under direct sunlight.
- Storage
- Requirement to be met by storeroom and containers: Keep the storage from the sunlight and the storeroom ventilated and temperature under 120 Fahrenheit. Keep the lighter stored in the containers in order.
- Information about storage in a common storage facility: None
- Further information about storage conditions: Keep the container ventilated.

8 Exposure controls and personal protection:

- Additional information about design of technical systems: No further data; See item 7.
- Components with critical values that require monitoring at the workplace: The product does not contain any relevant quantities of material with critical values that have to be monitored at the workplace.
- Additional information: Information valid at the time of review of safety data sheet.
- Personal protective equipment
- General protective and hygienic measures: Do not inhale gases. Do not keep igniting longer than one minute.
- **Respiratory protection:** None
- **Protection of hand:** Do not touch the flame hole immediately after igniting.
- **Penetration time of glove material:** None
- Not suitable are glove made of the following material: None
- **Eye protection:** Keep away from the eyes while igniting.
- **Body protection:** Keep away from the body while igniting.

Trade name: Cigarette lighter

9 Physical and chemical properties:

• General information		
Form:	Form: Butane gas is dispersion	
Colour:	Ir: Butane gas is clear	
Odour:	Butane gas is irritated	
• Change in condition		
Melting point/Melting range:		-100C
Boiling point/Boiling range:		31.1 Fahrenheit
• Flash point:		-76 Fahrenheit
• Self-inflammability:		Products is not self-igniting
• Danger of explosion:		Product is explosive.
Vapour pi	ressure at 20C:	0.2Mpa
• Density at	t 20C:	0.565(H2O=1)
• Solubility in/Miscibility with water: Butane gas is unsolvable		

• PH-value at 20C:

10 Stability and reactivity

- Conditions to be avoided: No decomposition if used according to specifications.
- Minimum self life: 18 months from production, if stored properly.
- Material to be avoided: oxidized agents
- **Dangerous reaction:** None
- Dangerous products of decomposition: None, if storage and handling is done according to specification

11 Toxicological information

- Acute toxicity: Not applicable
- Primary irritant effect
- On the skin: Butane gas is slightly irritant. Self-evaporated.
- On the eyes: Butane gas is strong irritant effect, with the danger of severe eye injury.
- Sensitization: Butane gas is sensitization possible by skin contact.

12 Ecological information

- Information about elimination (persistence and degradability):
- Method:
- Analysing method:
- Degree of elimination:
- **Other information:** The metal lighter are readily to eliminate.
- Mobility and bioaccumulation potential: Low potential to bio-accumulate.
- Ecotoxicological effects:
- Aquatic toxicity: None
- Additional ecological information:

• AOX-indication:

The product does not contain substances, which can influence the AOX of waste water.

- The formulation contains the following heavy metal and compounds according to EC guideline No. 76/464 EC:
 - None

13 Disposal considerations

- Product:
- **Recommendation:** Common methods except do not incinerate.
- European waste catalogue:
- Container packaging:
- Recommendation:
- **Recommendation cleaning ag**ent:

14 Transportation information:

- Land transportation ADR/RID and GGVS/GGVE (cross-border/domestic)
- ADR/RID-GGVS/E Class:
- Kemler Number:
- UN-Number: 1057
- Packaging group:
- Label:
- Designation of goods:
- Marine transportation IMDG/GGVSea:
- IMDG Class: 2.1
- UN-Number: 1057
- Label:
- Packaging group:
- EMS Number: F D, S -U
- Marine pollution: No.
- Correct technical name:
- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class:
- UN/ID Number:
- Package group:
- Correct technical name:

15 Regulatory information

- Designation according to EC guideline:
- Code letter and hazard designation of products:
- Hazard-determining components of labeling:
- Risk phases:
- Safety phrases:
- National regulations:

- Regulations which may apply in event of accident:
- Control of major Accident hazards (COMAH)
- Water hazard class:

16 Other information:

- R-phrases relevant to the product's hazardous ingredients:
- Training hints:
- Department issuing data specification sheet:
- Contact:
- Data compared to the previous version altered.