

**EC- Safety Data Sheet in accordance with TRGS 220 - 91 / 155 EEC**  
**Product: Gas lighter / gas utility lighter / refill cartridge for gas lighters**

**1. TYPE OF PRODUCT AND COMPANY NAME**

PRODUCT:	Gas lighter / gas utility lighter
SAFETY DATA SHEET No.:	TSG-003
DATE:	November 2002
MANUFACTURER / SUPPLIER:	HIGHLANDER SCOTLAND LTD
TELEPHONE No.:	01506 438 438
TELEFAX No.:	01506 438 443
STREET:	TODD SQUARE
CITY:	LIVINGSTON
POST CODE:	EH54 5EF
EMERGENCY NUMBER:	01506 438 438
E-MAIL:	info@highlander-outdoor.com
INTERNET:	www.highlander-outdoor.com

**2. COMPOSITION / COMPONENT SPECIFICATIONS**

The principle components are:

1. Tank body: Acrylnitrile - styrene . copolymer CAS-No. 9003-54-7
2. Contents: Propane / butane CAS-No. 74-98-6, CAS No. 106-97-8, CAS-No.75-28-5

The remaining components are of no relevance as far as safety is concerned and will not be mentioned hereafter.

**3. POSSIBLE DANGERS**

R12  
Extremely flammable

Providing they are stored and handled in compliance with instructions, gas lighters do not pose a serious threat to health.

Do not expose container to temperatures exceeding 50°C (e.g. direct sunlight). Do not force open. Store in well-aired rooms at room temperature. Refer to section 6 TRGS 300.

**4. FIRST AID**

Rinse eyes out well with water in the event that eyes come into contact with the product. Breathe in plenty of fresh air after inhaling. Consult a doctor if symptoms persist.

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**5. EXTINGUISHING FIRE**

Remove the lighter from the endangered area - risk of explosion - and extinguish the fire with water jet spray, foam, extinguishing powder or CO<sup>2</sup>. In the event of fire poisonous fumes may exude. Fire fighting personnel must wear breathing apparatus.

**6. PROCEEDINGS IN EVENT OF UNINTENTIONAL RELEASE**

Non-applicable

**7. HANDLING & STORAGE**

Ignition group (VDE 165): G2  
Do not expose lighters to temperatures exceeding 50°C (e.g. direct sunlight). Do not force open. Store at room temperature in well-aired rooms. Smoking, open fires and storage of waste not allowed in rooms where gas lighters are stored.

**8. EXPOSURE LIMIT & PERSONAL PROTECTION EQUIPMENT**

NO DATA AVAILABLE

**9. PHYSICAL & CHEMICAL CHARACTERISTICS**

Description:	Liquefied gas
Colour:	Colourless
Odour:	Odourless
Density:	0.56 g / cm <sup>3</sup> at 20°C DIN 51 618
Vapour pressure:	3,000 mbar at 20°C DIN 51 640 10,530 mbar at 70°C
Viscosity:	not applicable
Liquid solubility:	practically insoluble
pH value:	not applicable
Flash point:	not applicable, as gaseous
Ignition temperature:	430°C
Explosion limits:	min.: 1.5 vol.% max.: 8.5 vol. %

**10. STABILITY & REACTIVITY**

Exposure to temperatures exceeding 50°C causes impermissible increases in pressure and can cause the lighter tank to burst.

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**11. TOXICOLOGICAL DATA**

Providing the products are used for the intended purpose and are handled properly, dangerous side effects are not known. The following details apply to the gas contained in the products and not to the products themselves.

**Inhalation:**

High doses can affect the central nervous system with symptoms ranging from light depression to cramps or unconsciousness.

Inhalation of high vapour levels (saturated state) over a period of several minutes can be fatal. Saturated vapour levels can occur in closed or not well-aired areas.

Can cause skin irritation, breathing problems, coma and death without there necessarily being any warning odour.

Inhalation of vapour is to be avoided.

**Irritant (eyes):**

Contact with flash vaporising gases or vaporising liquids can cause frostbite or damage to the eye tissue.

**Chronic exposure:**

No data available

**Toxicity data:**

**Acute exposure:**

This product has similar characteristics to chemically pure propane: from propane there is no specific poisonous effect known, but it does induce narcosis in high concentration. The symptoms disappear quickly in fresh air. The quick vaporisation of the liquid can on the one hand cause breathing problems and therefore lead to unconsciousness and death by choking, on the other hand it can cause frostbite if skin or eyes come into contact with the liquid.

**Chronic exposure:**

Currently there is no available data concerning toxicity.

**12. ECOLOGICAL DATA**

Specific ecological data is not available for gas lighters

Water polluting:	No
TA air:	Class III

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**13. GUIDELINES ON DISPOSAL**

Only lighters which are completely empty of gas may be disposed of in household waste.

**14. TRANSPORTATION**

By road - truck / rail

Description:	GGVSE <i>Lighters containing flammable gas</i> ADR/RID
Regulation:	GGVSE / ADR 2.2.2
Class:	2
Classification code:	6 F
Transportation category.:	2
Limited volume:	LQ0 (< 10 kg gross - refer to Multilateral Agreement M100)
Hazard label:	2.1
Tested packaging:	UN tested 4G cartons
Markings:	UN 1057
Accident data sheet:	GGVS/GGVE 1 copy ADR/RID 1 copy from 333 kilos net

General:	
Prohibited packing combination:	GGVS / ADR - refer to 4.1.10.4 / MP9
Prohibited loading combination:	GGVS / ADR - not permitted with classes 1, 4 & 5 (if together then Label 1), refer to GGVSE / ADR 4.5.2

By post: not permitted.

By sea GGVSea / IMDG:

Technical description:	<i>LIGHTERS containing flammable gas</i>
Class:	2.1
UN-No.	1057
Emergency schedule	2 – 13
Accompanying documents:	Hazardous Goods Declaration indicating "NON-MARINE POLLUTANT"
Hazard label:	2.1

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Tested packaging:	UN tested 4G cartons (Insurance group II)
Medical First Aid Guide	620 +311
Markings:	UN 1057
Regulations for transport to/from port	Refer to guidelines on road - truck / rail transportation

**By air IATA**

Description:	<i>Lighters (Cigarettes), containing flammable gas</i>
Class:	2.1
UN-No.	1057
Packing note:	201
Accompanying documents	Consignor's Declaration of Dangerous Goods
Hazard label:	Flammable gas 2.1
Tested packaging:	UN tested 4G cartons
Markings:	UN 1057
Regulations for transport to/from airport	Refer to guidelines on road- truck / rail transportation

**15. REGULATIONS**

Adhere to Accident Prevention regulations and Federal Emission Protection Laws

**16. OTHER DETAILS**

The recommendations given in this safety sheet are based on our suppliers' safety sheets. The statements represent our current level of knowledge and experience.

We take no responsibility for the correctness and completeness of the recommendations herein. The user must convince himself that the statements are sufficient and apply to his particular usage.