Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Date of issue: 26/04/2022 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

. Misture

1.1. Product identifier Draduat form

Product form	: Mixture
Name	: Gas lighter
Trade name	: Gas lighter
EC Index-No.	: 601-004-00-0
EC-No.	: 200-857-2
CAS-No.	: 75-28-5
Product code	: LIGH-002
Formula	: C4H10

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Main use category

: Laboratory use

1.3. Details of the supplier of the safety data sheet

labbox labware s.l. Migjorn, 1 P.O. Box Barcelona (SPAIN) 08338 Premia de Dalt, SPAIN ES T +34 937 07 79 70, F +34 937 909 532 info@labbox.com, www.labbox.com

1.4. Emergency telephone number

Emergency number

: +34 937 077 970 (For technical information_Office Hours) In case of medical emergency phone 112 or to your local emergency number.

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	

SECTION 2: Hazards identification	
2.1. Classification of the substance or mixture	
Classification according to Regulation (EC) No. 1272	2/2008 [CLP]
Flammable gases, Category 1 Gases under pressure	H220
Gases under pressure : Liquefied gas Full text of H and EUH statements: see section 16	H280
Adverse physicochemical, human health and environ	nmental effects
No additional information available	

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

: H220 - Extremely flammable gas.
H280 - Contains gas under pressure; may explode if heated.
: P102 - Keep out of reach of children.
P103 - Read label before use.
P210 - Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P381 - Eliminate all ignition sources if safe to do so.
P403 - Store in a well-ventilated place.
P410+P403 - Protect from sunlight. Store in a well-ventilated place.

2.3. Other hazards

PBT: not relevant - no registration required

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
isobutane	CAS-No.: 75-28-5 EC-No.: 200-857-2 EC Index-No.: 601-004-00-0	50 – 54	Flam. Gas 1, H220 Press. Gas
propane	CAS-No.: 74-98-6 EC-No.: 200-827-9 EC Index-No.: 601-003-00-5	25,5 – 27	Flam. Gas 1, H220 Press. Gas
butane	CAS-No.: 106-97-8 EC-No.: 203-448-7 EC Index-No.: 601-004-00-0	21 – 22,5	Flam. Gas 1, H220 Press. Gas

Full text of H and EUH statements: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary.
First-aid measures after skin contact	: Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Immediately rinse with water for a prolonged period while holding the eyelids wide open. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Induce vomiting if victim completely conscious/alert. Get medical advice/attention.
4.2. Most important symptoms and ef	fects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Never give anything by mouth to an unconscious person.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable extinguishing media	: Water spray. Carbon dioxide. Foam.		
5.2. Special hazards arising from the substance or mixture			
Hazardous decomposition products in case of fire	: Toxic fumes may be released.		
5.3. Advice for firefighters			
Firefighting instructions Protection during firefighting	 Do not enter fire area without proper protective equipment, including respiratory protection. Wear recommended personal protective equipment. Use self-contained breathing apparatus and chemically protective clothing. 		

SECTION 6: Accidental release measures				
6.1. Personal precautions, protective equipment and emergency procedures				
General measures	: Isolate from fire, if possible, without unnecessary risk. Evacuate area.			
For non-emergency personnel				
Protective equipment	: Wear recommended personal protective equipment.			
For emergency responders				
Protective equipment	: For further information refer to section 8: "Exposure controls/personal protection".			
6.2. Environmental precautions				
Do not allow to enter drains or water courses.				
6.3. Methods and material for containment	t and cleaning up			

For containment

: Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Consult an expert on waste disposal or treatment.

6.4. Reference to other sections

See Heading 8. For further information refer to section 13.

SECTION 7: Handling and storage			
7.1. Precautions for safe handling			
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product.		
7.2. Conditions for safe storage, including any incompatibilities			
Storage conditions Storage temperature	: Keep cool. Store at ambient temperature. : < 50 °C		
Switzerland Storage class (LK)	: LK 2 - Liquefied or pressurized gases		
7.3. Specific end use(s)			

Laboratory chemicals.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 8: Exposure controls/personal protection			
8.1. Control parameters			
DNEL and PNEC			
Gas lighter (75-28-5)			
DNEL/DMEL (Workers)			
Long-term - systemic effects, inhalation	13936 mg/m ³		
DNEL/DMEL (General population)			
Long-term - systemic effects, inhalation	2476 mg/m ³		
PNEC (Water)			
PNEC aqua (freshwater)	0,1 mg/l		
PNEC aqua (marine water)	0,01 mg/l		
PNEC aqua (intermittent, freshwater)	1 mg/l		
PNEC (Sediment)			
PNEC sediment (freshwater)	0,75 mg/kg dwt		
PNEC (STP)			
PNEC sewage treatment plant	73 mg/l		

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:

EN 374. Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Safety glasses

Eye protection			
Туре	Field of application	Characteristics	Standard
Safety glasses			

Skin protection

Skin and body protection:

Chemical resistant safety shoes

Skin and body protection	
Туре	Standard
Safety shoes	EN ISO 20344

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard

Respiratory protection

Respiratory protection:

Wear suitable respiratory equipment in case of insufficient ventilation

Respiratory protection			
Device	Filter type	Condition	Standard
filtering face piece			EN 14387

Environmental exposure controls

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Gas
Colour	: clear.
Odour	: strong.
Odour threshold	: Not available
Melting point	: -42,1 °C
Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: Not available
Explosive properties	: No data available.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: -23 °C
Auto-ignition temperature	: > 470 °C
Decomposition temperature	: Not available
рН	: Not applicable
Viscosity, kinematic	: Not applicable
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: 1,09
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: Not applicable
Relative density	: Not applicable
Relative vapour density at 20 °C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable in use and storage conditions as recommended in item 7.

10.2. Chemical stability

Stable under normal conditions.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

10.3. Possibility of hazardous reactions

Stable under normal conditions of use.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

Oxidizing agent. Acids. Aluminium. alkali metals.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified Not classified Not classified
Gas lighter (75-28-5)	
ATE CLP (oral)	10 mg/kg bodyweight
ATE CLP (dermal)	8 mg/kg bodyweight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Gas lighter (75-28-5)	
NOAEC (inhalation, rat, gas, 90 days)	50000 ppm Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
Aspiration hazard	: Not applicable
11.2. Information on other hazards	

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term : (acute)	Harmful to aquatic life. Not classified Not classified
Gas lighter (75-28-5)	
LC50 - Fish [1]	24,11 mg/l
EC50 72h - Algae [1]	7,71 mg/l

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.2. Persistence and degradability	
Gas lighter (75-28-5)	
Persistence and degradability	Rapidly degradable
isobutane (75-28-5)	
Persistence and degradability	Rapidly degradable
propane (74-98-6)	
Persistence and degradability	Rapidly degradable
butane (106-97-8)	
Persistence and degradability	Rapidly degradable
12.3. Bioaccumulative potential	
Gas lighter (75-28-5)	
Partition coefficient n-octanol/water (Log Pow)	1,09
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessment	
Gas lighter (75-28-5)	
PBT: not relevant – no registration required	
12.6. Endocrine disrupting properties	
Adverse effects on the environment caused by : endocrine disrupting properties	Not applicable.
12.7. Other adverse effects	
No additional information available	

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Waste treatment methods Product/Packaging disposal recommendations	Must follow special treatment according to local regulation.Comply with applicable regulations for solid waste disposal.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number		
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID)	: UN 1057 : UN 1057 : UN 1057 : UN 1057 : UN 1057	
14.2. UN proper shipping name		
Proper Shipping Name (ADR) Proper Shipping Name (IMDG)	: LIGHTERS : LIGHTERS	

Safety Data Sheet

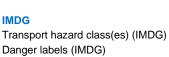
according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Proper Shipping Name (IATA) Proper Shipping Name (ADN)	: Lighters : LIGHTERS
Proper Shipping Name (RID)	: LIGHTERS
Transport document description (ADR) (ADR)	: UN 1057 LIGHTERS, 2.1, (D)
Transport document description (IMDG)	: UN 1057 LIGHTERS, 2.1
Transport document description (IATA)	: UN 1057 Lighters, 2.1
Transport document description (ADN)	: UN 1057 LIGHTERS, 2.1
Transport document description (RID)	: UN 1057 LIGHTERS, 2.1

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	: 2.1
Danger labels (ADR)	: 2.1



ΙΑΤΑ

Transport hazard class(es) (IATA) Danger labels (IATA)

•		N I
А	υ	IN
	_	

Transport hazard class(es) (ADN) Danger labels (ADN)

RID

Transport hazard class(es) (RID) Danger labels (RID)

: 2.1 : 2.1 : 2.1

: 2.1

: 2.1 :

: 2.1 : 2.1

:



: 2.1 : 2.1 :

14.4. Packing group

Packing group (ADR) Packing group (IMDG) Packing group (IATA) Packing group (ADN) Packing group (RID)

:	Not applicable
	Net englissing

: Not applicable

: Not applicable

- : Not applicable
- : Not applicable

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

	led by Regulation (EO) 2020/070
14.5. Environmental hazards	
Dangerous for the environment	: No
Marine pollutant	: No
EmS-No. (Fire)	: F-D
EmS-No. (Spillage)	: S-U
Other information	: No supplementary information available
14.6. Special precautions for user	
Overland transport	
Classification code (ADR)	: 6F
Special provisions (ADR)	: 201, 654, 658
Limited quantities (ADR)	: 0
Excepted quantities (ADR)	: E0
Packing instructions (ADR)	: P002
Special packing provisions (ADR)	: PP84, RR5
Mixed packing provisions (ADR)	: MP9
Transport category (ADR)	: 2
Special provisions for carriage - Loading, unloading	
and handling (ADR)	
Special provisions for carriage - Operation (ADR)	: S2
Tunnel restriction code (ADR)	: 52 : D
Transport by sea	
Special provisions (IMDG)	: 201
Limited quantities (IMDG)	: 0
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P002
Special packing provisions (IMDG)	: PP84
Stowage category (IMDG)	: B
Stowage and handling (IMDG)	: SW2
Properties and observations (IMDG)	: Lighters or lighter refills containing butane or other flammable gas.
Air transport	
PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Forbidden
PCA limited quantity max net quantity (IATA)	: Forbidden
PCA packing instructions (IATA)	: 201
PCA max net quantity (IATA)	
	: 1kg
CAO packing instructions (IATA)	: 201
CAO max net quantity (IATA)	: 15kg
Special provisions (IATA)	: A802
ERG code (IATA)	: 10L
Inland waterway transport	
Classification code (ADN)	: 6F
Special provisions (ADN)	: 201, 654, 658
Limited quantities (ADN)	: 0
Excepted quantities (ADN)	: E0
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 1
Pail transport	
Rail transport	· 6E
Classification code (RID)	: 6F
Special provisions (RID)	: 201, 654, 658
Limited quantities (RID)	: 0
Excepted quantities (RID)	: E0
Packing instructions (RID)	: P002
Special packing provisions (RID)	: PP84, RR5
Mixed packing provisions (PID)	· MPQ

Transport category (RID)

Mixed packing provisions (RID)

: MP9

: 2

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Special provisions for carriage - Loading, unloading	:	CW9
and handling (RID)		
Colis express (express parcels) (RID)	:	CE2
Hazard identification number (RID)	:	23

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no REACH substances with Annex XVII restrictions

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

National regulations

Germany

Employment restrictions	: Observe restrictions according Act on the Protection of Working Mothers (MuSchG). Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).
Water hazard class (WGK)	: WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).
Hazardous Incident Ordinance (12. BImSchV)	: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)
Netherlands	
SZW-lijst van kankerverwekkende stoffen	: None of the components are listed
SZW-lijst van mutagene stoffen	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: None of the components are listed

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Denmark	
Class for fire hazard	: Add boilingpoint
Store unit	: Add boilingpoint
Classification remarks	: Add boilingpoint; Emergency management guidelines for the storage of flammable liquids must be followed
Danish National Regulations	: Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Flam. Gas 1	Flammable gases, Category 1
Press. Gas	Gases under pressure
H220	Extremely flammable gas.
H280	Contains gas under pressure; may explode if heated.

Safety Data Sheet (SDS), EU

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 construed as guaranteeing any specific property of the product.