

# MATERIAL SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE SUBSTANCE

**Product name** : Disposable cartridge

190gr., 330 ml

In an emergency situation please call **+46.8.564 842 30** for additional information on the product.

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS-No	EINECS-No	Hazard symbol/R-wording
Propane	74-98-6	200-827-9	F+, R12 S2 , 9, 16
Isobutane/n-butane	106-97-8	203-448-7	F+, R12 S2 , 9, 16

## 3. HAZARD IDENTIFICATION

F+ Extremely flammable  
R12 Extremely flammable  
S2 Keep out of the reach of children  
S9 Keep container in a well-ventilated place  
S16 Keep away from sources of ignition - No smoking



Additional information on listed risk phrases see section 16.

#### 4. FIRST AID MEASURES

**Inhalation:** Supply fresh air, consult doctor in case of complaints.  
**Skin contact:** Generally the product does not irritate the skin.  
If frostbite occurs, flush with lukewarm water (105-115°F, 41°C)  
DO NOT USE HOT WATER, contact doctor.  
**Eye contact:** Rinse opened eye for several minutes under running water.  
Contact doctor if any symptoms remain.  
**Ingestion:** If symptoms persist consult doctor.

#### 5. FIRE FIGHTING MEASURES

**Suitable extinguishing agents:** CO2, sand, extinguishing powder.  
**Do not use water.**  
**For safety reasons unsuitable extinguishing agents:** Water, Water with full jet.  
**Protective equipment:** No special measures required.

#### 6. ACCIDENTAL RELEASE MEASURES

**Person-related safety precautions:** Wear protective equipment.  
Keep unprotected persons away.  
Keep ignition sources away.  
**Measures for environmental protection:** No special measures required.  
**Measures for cleaning/collecting:** Ensure good ventilation.  
Do not flush with water or aqueous cleansing agents.

#### 7. HANDLING AND STORAGE

**Handling:**  
**Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
**Information about fire – and explosion protection:** Keep ignition sources away – Do not smoke.  
Protect against electrostatic charges.  
Pressurised container, protect from sunlight and do not expose to temperatures exceeding 50°C.  
Do not pierce or burn, even after use.  
Do not spray onto a naked flame or any incandescent material.

**Storage:**

**Requirements to be met by storerooms and receptacles:** Store in a cool and well-ventilated location. Observe official regulations on storing packaging with pressurised containers.

**Information about storage in one common storage facility:** Not required.

**Further information about storage conditions:** Keep receptacle tightly sealed. Store in cool, dry condition. Protect from heat and direct sunlight.

**Class according to regulation on flammable liquids:** Void.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Additional information about design of technical facilities:** No further data; see item 7.

**9. PHYSICAL AND CHEMICAL PROPERTIES**General information

**Form:** liquid under pressure, gas at 15,6°C and 1 Bar  
**Colour:** Colourless  
**Odour:** Characteristic  
**Ph** Neutral  
**Boiling point:** - 0,5 °C  
**Flash point:** - 74°C  
**Ignition temperature:** 405°C  
**Self-ignition** Product is not self-igniting.  
**Danger of explosion:** Product does not present an explosion hazard.  
**Specific gravity at 15,6 °C:** 0,584 Kg/m<sub>3</sub>  
**Solubility in Miscibility with water:** Not miscible or difficult to mix.

**10. STABILITY AND REACTIVITY**

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications. Avoid high heating or sudden rapid decompression.

**Dangerous reactions:** No dangerous reactions known.

**Dangerous decomposition products:** No dangerous decomposition products known.

### 11. TOXICOLOGICAL INFORMATION

Acute toxicity	lightly toxic asphyxiating gas
Primary irritant effect	In gaseous state :
On the skin:	No irritant effect.
On the eye:	No irritating effect.
Sensitisation:	No sensitising effects known.

### 12. ECOLOGICAL INFORMATION

General note: Generally not hazardous for water, does not mix.

### 13. DISPOSAL CONSIDERATION

Recommendation: Must not be disposed together with household garbage.  
Do not allow product to reach sewage system.  
Product to be deposited at suitable recycling place, according to official regulations.

### 14. TRANSPORT INFORMATION

#### Land transport ADR / RID (car and train )

ADR / RID Class:	2 5F
UN-Number:	2037
Packing group: -	--
Hazard label:	2,1
Description of goods:	Not refillable receptacles contain gas under pressure

#### Marine transport IMDG

IMDG Class:	2,1
UN-Number:	2037
Label:	2,1
Packing group:	-
EMS Number:	
Marine pollutant:	No
Proper shipping name:	Not refillable receptacles contain gas under pressure

## Air transport ICAO / IATA

ICAO / IATA Class: 2,1  
UN-Number: 2037  
Label: 2,1  
Packaging group: -  
Proper shipping name: Not refillable receptacles contain gas under pressure

## 15. REGULATORY INFORMATION



### Extremely flammable

FLAMMABLE GAS UNDER PRESSURE.

Protect from direct sunlight. Do not expose to temperatures exceeding 50°C (120°F). Keep out of reach of children. Follow strictly the instructions for use supplied with the appliance. WARNING: DO NOT REFILL. Do not puncture/pierce or incinerate even after use. Changing the cartridge: assemble or dismantle cartridge from appliance outdoors only, free from ignition sources. Close the appliance valve. Remove the appliance from the cartridge. Replace the connection seal if it is damaged or lost. Avoid cross threading. Screw the down hand tight only. Store in cool dry place. Discard in a safe place. This cartridge complies with EN 417.

## 16. OTHER INFORMATION

**Risks at inhalation:** Propane/butane is a gas slightly narcotic and may in highly concentrated form irritate mucous membranes and cause suffocation. The suffocation effect is proportional to the decrease of the partial pressure of the oxygen in the inhalation air obtained at a mixture of propane/butane and air.

When the oxygen content has decreased to three fourths or less of the normal content asphyxia occurs.

The body interprets this as a lack of oxygen and reacts (at concentrations of 50 vol.-% propane/butane in air) with pronounced symptoms of suffocation in the form of difficulty to breath and hyperventilation simultaneously with deteriorated reaction ability and impaired muscle co-ordination.

More serious cases (at concentrations of 75 vol.-% propane/butane in air) may end in unconsciousness and death.

**Risks at contact:** Propane/butane in liquefied or gaseous form may cause serious frostbites on skin or eyes. If propane/butane in liquefied form gets into contact with objects of a higher temperature than the liquid itself it results in fierce boiling and splashing.

**Risks of fire and explosion:** Propane/butane is a highly inflammable gas. Mixtures of air with a content of 3,35 - 23,8 weight-% propane/butane (2,0 - 10,2 vol.-%) are explosive. Propane/butane is heavier than air and falls to the ground.