



**PRIMAGAZ**

# Safety Data Sheet

Safety data sheet according to (EC) No. 1907/2006 (Swedish/English)

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

### 1.1. Product identifier

#### Propane

UFI: 7VR2-JOG2-600A-AR6M

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

Professional/industrial and consumer use.

This product is exempted from REACH-registration according to article 2(7)(b).

### 1.3. Details of the supplier of the safety data sheet:

Primagaz Sverige AB

Krafverksvägen

Tel.: +46 (0)303 72 71 00

444 32 Stenungsund

Sweden

Responsible person for the safety data sheet (e-mail): [kundservice@primagaz.se](mailto:kundservice@primagaz.se)

### 1.4. Emergency telephone number:

Sweden: Acute: 112 – Ask for the Poison Information Centre. In less acute cases: 010 4566700  
(Direct Numbers to the Poison Information Centre).

NHS (England or Wales): Dial 111 or 0845 4647 NHS 24 (Scotland): Dial 111

National Poisons Information Centre (Ireland): +353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week)

Healthcare Professionals: +353 (1) 809 2566 (24-hour service)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture:

Extremely flammable gas under pressure.

CLP (1272/2008): Flam. Gas. 1;H220 Press. Gas; H280(Liq)

### 2.2. Label elements:



Signal word:

DANGER

<b>Hazard statements:</b>	
H220:	Extremely flammable gas.
H280:	Contains gas under pressure; may explode if heated.
<b>Precautionary statements:</b>	
P102:	Keep out of reach of children.
P210:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P377:	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P381:	In case of leakage, eliminate all ignition sources.
P403:	Store in a well-ventilated place.

### 2.3. Other hazards

High concentrations of gas will displace oxygen in air. This may lead to sudden loss of consciousness and death due to oxygen deficiency (anoxia). Exposure to liquid Propane may cause cold burns on eyes and/or skin. Propane vapours are heavier than air at ordinary temperatures and may drift along the ground and reach distant ignition sources which may lead to back firing.

#### PBT/vPvB:

The ingredients are not considered PBT/vPvB according to criteria in Annex XIII.

#### Endocrine disrupting properties:

The substances are not identified as having endocrine disrupting properties in accordance with the criteria set out in Regulation 2017/2100 or Regulation 2018/605.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures:

% w/w	Substance name	CAS-no.	EC-no.	Index-no.	Classification
>90	Propane	74-98-6	200-827-9	601-006-00-5	Flam. Gas 1;H220 Press. Gas;H280
<5	Butane (containing < 0.1 % butadiene)	106-97-8	203-448-7	601-004-00-0	Flam. Gas 1;H220 Press. Gas;H280

Wording of hazard statements - see section 16

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures:

#### Inhalation:

Move the affected person to fresh air. Mild cases: Remain at rest. If needed: seek medical attention.

Severe cases: Place the person in recovery position and keep warm. If respiration has stopped, administer artificial respiration. Seek medical advice immediately.

#### Skin contact:

Do not remove clothing that is adhering to the skin. Thaw frosted parts with lukewarm water. Do not rub affected area. In case of ulcers or skin disorders: Seek medical attention/advice immediately.

#### Eye contact:

Immediately flush with water or physiological salt water, holding eye lids open, remember to remove contact lenses, if any. If irritation persists: Get medical attention.

**Ingestion:**

Not a likely exposure. Frostbite on lips and mouth must be rinsed with water – see “Skin contact”.

**Burns:**

Flush with water until pain ceases. Remove cloth that isn't burnt to the skin. If needed seek medical attention, continue to flush on the way.

**4.2. Most important symptoms and effects, both acute and delayed:**

High concentrations may lead to suffocation. Low concentrations may cause drowsiness. May cause irritation of skin and eyes, causing headache, dizziness and sudden loss of consciousness. Prolonged or frequent exposure to vapours of volatile organic compounds may result in damage on liver, kidneys, blood or central nervous system (including brain damage).

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

Show this safety data sheet to a physician or emergency ward.

**SECTION 5: Firefighting measures****5.1. Extinguishing media:**

Shut off the gas supply.

Use water spray or dry chemical. Do not use foam or carbon dioxide.

**5.2. Special hazards arising from the substance or mixture:**

Risk of explosion (BLEVE) if pressurised containers are exposed to heat. Do not breathe smoke fumes. In case of fire, the product may form hazardous decomposition products such as oxides of carbon.

**5.3. Advice for firefighters:**

Remove containers if possible or keep containers cool by spraying with water.

Use soft jet of water to cool the containers. Use breathing apparatus with an independent source of air.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures:**

Use personal protective equipment - see section 8. Shut off the gas supply.

Remove sources of ignition. Ventilate the area.

**6.2. Environmental precautions:**

Do not empty into drains - see section 12.

**6.3. Methods and material for containment and cleaning up:**

Ventilate the area. Shut off the gas supply. Further handling of spillage - see section 13.

**6.4. Reference to other sections:**

See references above.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling:**

Avoid breathing vapours/mist. Provide adequate ventilation. Avoid contact with skin (frost damage) and eyes. Do not smoke. Wash skin with water and soap after use. Emergency shower is recommended. Do not use near fire, sparks or hot surfaces.

Use explosion-proof equipment. Handling systems must be earthed and have equipotential bonding. Close the container valve after each use.

**7.2. Conditions for safe storage, including any incompatibilities:**

Store securely and out of reach of unauthorized personnel and separated from food, feed etc. To be kept only in closed and approved original pressure containers in a ventilated area. Empty containers that have not been cleaned should be treated as full containers. Do not remove labelling. Observe official regulations on storage of pressurized containers.

**7.3. Specific end use(s):**

See section 1.

## SECTION 8: Exposure controls/Personal protection

**8.1. Control parameters:**

Occupational exposure limits (Sweden): None

Occupational exposure limits, UK (EH40/ed.2020):

Substance	8-hour TWA	K5-min STEL	Comments
n-Butane	600 ppm = 1450 mg/m <sup>3</sup>	750 ppm = 1810 mg/m <sup>3</sup>	–

DNEL/PNEC: No substances that are health or environmentally hazardous.

**8.2. Exposure controls:**

Appropriate engineering controls: Provide efficient ventilation. Pressure-bearing systems should be checked regularly for leaks. Gas detectors should be used when combustible gases can escape.

Personal protective equipment:

Inhalation:

Respiratory equipment is normally not required by sufficient ventilation. In case of inadequate ventilation: Use an approved mask (EN136) with a gas filter type AX (brown – organic vapours). The filter has a limited lifetime and must be changed. Read the instruction.

Skin:

Wear protective gloves against mechanical risks (EN388) when handling gas containers.

If necessary use, flame resistant, anti-static work clothes (Shoes (EN ISO 20345); Clothing (EN ISO 1149-5)).

Eyes:

Wear tight fitting safety goggles (EN166) when filling or opening connectors.

Environmental exposure controls:

None in particular.

## SECTION 9: Physical and chemical properties

**9.1. Information on basic physical and chemical properties:**

Physical state:	Compressed liquid gas
Colour:	Colourless
Odour:	Of added odorant
Melting point / freezing point (°C):	-188
Boiling point or initial boiling point and boiling range (°C):	-46
Flammability (solid, gas) (°C):	Combustible gas
Lower and upper explosion limit (vol-%):	1.8 – 11.1
Flash point (°C):	-100
Auto-ignition temperature (°C):	470
Decomposition temperature (°C):	Not determined
pH:	Not determined
Kinematic viscosity:	Not determined
Solubility:	75 (slightly soluble in water)
Partition coefficient n-octanol/water (log value):	2.36 (Propan)
Vapour pressure (bar, 25°C):	9
Density and/or relative density:	0.6
Relative vapour density:	1.5 (heavier than air)
Particle characteristics:	Not determined

**9.2. Other information:**

None relevant

## SECTION 10: Stability and reactivity

**10.1. Reactivity:**

No available data.

**10.2. Chemical stability:**

Stable under normal conditions (see section 7).

**10.3. Possibility of hazardous reactions:**

Vapours can be ignited by a spark, glow or a hot surface. Vapours are heavier than air and may form explosive mixtures with air. May drift along the ground and reach distant ignition sources which may lead to back firing.

**10.4. Conditions to avoid:**

Formation of sparks and glows. Excessive heating and sources of ignition.

**10.5. Incompatible materials:**

May react with strong oxidizing agents.

**10.6. Hazardous decomposition products:**

In case of extensive heating or fire the mixture may form hazardous decomposition product such as oxides of carbon.

## SECTION 11: Toxicological information

**11.1. Information on toxicological effects:**Acute toxicity:

Based on available data, the classification criteria are not met.

Skin corrosion/irritation:

Based on available data, the classification criteria are not met.

Serious eye damage/irritation:

Based on available data, the classification criteria are not met.

Respiratory or skin sensitization:

Based on available data, the classification criteria are not met.

Germ cell mutagenicity:

Based on available data, the classification criteria are not met.

Carcinogenicity:

Based on available data, the classification criteria are not met.

Reproductive toxicity:

Based on available data, the classification criteria are not met.

STOT-single exposure:

Based on available data, the classification criteria are not met.

STOT-repeated exposure:

Based on available data, the classification criteria are not met.

Aspiration hazard:

Based on available data, the classification criteria are not met.

Hazard class	Data	Test	Data source
Acute toxicity:			
Inhalation	LC <sub>50</sub> (inhalation, rat) = 658 mg/l/4h (Butane)	No information	IUCLID
Dermal	LC <sub>50</sub> (skin, rat) > 2000 mg/kg (Butane/Propane)	No information	Concawe
Oral	LC <sub>50</sub> (ingestion, rat) > 5000 mg/kg (Butane/Propane)	No information	Concawe
Corrosion/ irritation:	No eye irritation, rabbit (Butane/Propane)	No information	IUCLID
Sensitization:	No available/applicable data	-	-

CMR:	No bacterial mutagenicity (Butane/Propane)	Ames	IUCLID
	No available data, reproductive toxicity (Butane/Propane)	-	-
	No available data, carcinogenicity (Butane/Propane)	-	-

Information on likely routes of exposure: Skin, lungs and gastrointestinal tract.

Symptoms:

Inhalation: Vapours and aerosol mist may cause irritation to the airways. Inhalation of larger amounts may induce discomfort, nausea, dizziness, headache, narcosis and unconsciousness.

Skin: May cause cold burns and destroy skin tissue.

Eyes: May cause cold burns and give irreversible damage to the eye.

Ingestion: Not a likely exposure. Frostbite on lips and mouth must be rinsed with water – see “Skin”.

Chronic effects: Prolonged or frequent exposure to vapours of volatile organic compounds may result in damage on liver, kidneys, blood or central nervous system (including brain damage).

#### 11.2. Information on other hazards:

None known.

## SECTION 12: Ecological information

#### 12.1. Toxicity:

Aquatic	Data	Test (Media)	Data source
Fish	LC <sub>50</sub> (fish (not specified), 96h) > 1000 mg/l (Propane)	No information	IUCLID
Daphnia	EC <sub>50</sub> (daphnia, 48h) = 27 mg/l (Propane)	ECOSAR Calc.	ECHA
Algae	EC <sub>50</sub> (green algae, 72h) = 11 mg/l (Propane)	ECOSAR Calc.	ECHA

#### 12.2. Persistence and degradability:

Propane and Butane are rapidly degradable (OECD 301).

#### 12.3. Bioaccumulative potential:

Log K<sub>ow</sub> = 2.38 (Propane); 2.89 (Butane) – Low bioaccumulation potential.

#### 12.4. Mobility in soil:

Butane and propane are gasses by normal, atmospheric pressure and mixes with the surrounding air.

K<sub>oc</sub> (calculated) < 10 - Very high mobility expected in soil environments

#### 12.5. Results of PBT and vPvB assessment:

The ingredients are not considered PBT/vPvB according to criteria in Annex XIII.

#### 12.6. Other adverse effects:

None known.

#### 12.7. Other adverse effects:

None known.

## SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods:

The product is to be considered as hazardous waste.

Used or empty pressurised containers should be returned to Primagaz

#### EWC-code:

16 05 04 (Pressurised container with mixture)

## SECTION 14: Transport information

#### 14.1. UN number or ID number:

1965 (ADR/RID/IMDG)

**14.2. UN proper shipping name:**

HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S. (Propane) (ADR/RID/IMDG)  
 HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S. (Mixture C) (ADR/RID)

**14.3. Transport hazard class(es):**

2 (ADR/RID); 2.1 (IMDG)

**14.4. Packing group:**

None (ADR/RID/IMDG)

**14.5. Environmental hazards:**

No.

**14.6. Special precautions for user:**

None.

**14.7. Maritime transport in bulk according to IMO instruments:**

Not relevant.

## SECTION 15: Regulatory information

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

Must not be used by persons under 18 years of age. The employer shall assess the working conditions and, if there is any risk to the safety or health and any effects on the pregnancy or breastfeeding of workers, take the necessary measures to adjust the working conditions (Directive 92/85/EEC).

**15.2. Chemical Safety Assessment:**

No CSR.

## SECTION 16: Other information

**Hazard statements mentioned in section 2 and 3:**

H220: Extremely flammable gas.

H280: Contains gas under pressure; may explode if heated.

**Abbreviations:**

CMR = Carcinogenicity, mutagenicity and reproductive toxicity.

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

EC<sub>50</sub> = Effect Concentration 50 %

ECHA diss. = European Chemical Agency Registration dossier

FW = Fresh Water

LC<sub>50</sub> = Lethal Concentration 50 %

LD<sub>50</sub> = Lethal Dose 50 %

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

vPvB = very Persistent, very Bioaccumulative

**Literature:**

ECHA diss. = European Chemical Agency Registration dossier

EPA Ecotox = The US Environmental Protection Agency's database on ecotoxicological effects for chemicals.

IUCLID = International Uniform Chemical Database Information

RTECS = Register of Toxic Effects of Chemical Substances.

**Training advice:**

No special training is required. However, the user should be well instructed in the execution of his/her task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

**Changes since the previous edition:**

14.2.