



SAFETY DATA SHEET

according to Regulation (EU) No. 453/2010

Primus Allround Gas / Cassette Gas

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Index-No	601-004-00-0
CAS-No.	106-97-8
EC-No.	203-448-7
Product code	None.
Synonyms	None.

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

Use of the Substance/Preparation	Aerosol propellants
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1.3. Details of the supplier of the safety data sheet

Company/Undertaking Identification	Primus AB Box 6041 SE-171 06 SOLNA, Schweden www.primus.se Telefon +46-8-564 842 30 Telefax +46-8-564 842 40 info@primus.se
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1.4. Emergency telephone number	+46-8-564 842 30
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Issuing date	12.11.2012
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Version	GHS 1
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2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 (GHS/CLP)

Flammable aerosols, Cat. 1, H222
Compressed gas, H280

Classification according to EU Directives 67/548/EEC or 1999/45/EC

F+; R12

Additional information

For the full text of the phrases mentioned in this Section, see Section 16.

2.2. Label elements



Signal Word

Danger

Hazard Statements

H222: Extremely flammable aerosol.
H280: Contains gas under pressure; may explode if heated.

Precautionary statements

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P210b: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P211: Do not spray on an open flame or other ignition source.
P251: Pressurized container: Do not pierce or burn, even after use.
P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Additional advice

None.

GHS product identifier

Butane, CAS-No. 106-97-8, EC-No. 203-448-7
Odour marker (<100 ppm Thio-compounds)

Labelling according to Directives 67/548/EEC or 1999/45/EC



F+ - Extremely flammable.

R-phrases)

R12: Extremely flammable.

S-phrases)

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.

Hazardous component(s) which must be listed on the label

Butane, CAS-No. 106-97-8, EC-No. 203-448-7

2.3. Other hazards

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material.

Keep away from sources of ignition - No smoking. Keep away from children.

3. Composition/information on ingredients

Chemical characterization Extremely flammable liquefied gas.

Components		Product identifier
Butane	> 99%	CAS-No.: 106-97-8 EC-No.: 203-448-7 Index-No: 601-004-00-0
Odour marker (<100 ppm Thio-compounds)		

For the full text of the phrases mentioned in this Section, see Section 16.

Hazardous impurities None known.

4. First aid measures

4.1. Description of first aid measures

Inhalation	Move to fresh air. Consult a physician after significant exposure.
Skin contact	Wash with water and soap as a precaution.
Eye contact	No special measures required. If eye irritation persists, consult a specialist.
Ingestion	Ingest immediately about 350 ml (5 ml/kg body weight) of activated charcoal slurry. Consult a physician if necessary.

4.2. Most important symptoms and effects, both acute and delayed None known.

4.3. Indication of any immediate medical attention and special treatment needed If ingested, irrigate the stomach using activated charcoal in addition. Control of circulatory system. Oxygen, if needed.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use dry chemical, CO₂, water spray or alcohol foam.

Extinguishing media which must not be used for safety reasons High volume water jet.

5.2. Special hazards arising from the substance or mixture	Solvents may produce excessive pressure under fire-conditions. Sealed containers may rupture and ignite. Cool containers / tanks with water spray. Burning produces irritant fumes.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Standard procedure for chemical fires. Wear self contained breathing apparatus for fire fighting if necessary.
Specific methods	Do not use a solid water stream as it may scatter and spread fire.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel	Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Advice for emergency responders	Pay attention to the spreading of gases especially at ground level (heavier than air) and to the direction of the wind. Avoid skin contact with leaking liquid (danger of frostbite).

6.2. Environmental precautions Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up The product evaporates readily.

6.4. Reference to other sections See chapter 8 and 13.

7. Handling and storage

7.1. Precautions for safe handling	Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded.
7.2. Conditions for safe storage, including any incompatibilities	Keep containers tightly closed in a dry, cool and well-ventilated place.
7.3. Specific end use(s)	No information available.

8. Exposure controls/personal protection

8.1. Control parameters

Exposure limit(s) No data is available on the product itself.

Butane (CAS 106-97-8)

United Kingdom - Workplace	750 ppm STEL
Exposure Limits (WELs) - STELs	1810 mg/m ³ STEL
United Kingdom - Workplace	600 ppm TWA
Exposure Limits (WELs) - TWAs	1450 mg/m ³ TWA

8.2. Exposure controls

Occupational exposure controls Avoid contact with skin, eyes and clothing.

Personal protection equipment

Respiratory protection In the case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. Respirator with AX filter.

Hand protection Gloves made of latex.

Eye protection Safety glasses.

Skin and body protection In case of full contact: Long sleeved clothing.

Thermal hazards Container may rupture on heating.

Environmental exposure controls No special measures required.

9. Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Form	Compressed gas.
Colour	Colourless.
Odour	Rotten egg-like.
Odour Threshold	No information available.
pH:	n.a.
Melting point/range:	-137 °C
Boiling point/range:	0.5 °C
Flash point:	extremely flammable
Evaporation Rate:	No information available.
Flammability:	No information available.
Explosion limits:	1,9 - 8,5 %
Vapour pressure:	1520 mm Hg (18°C)
Vapor density:	2,05 (air=1)
Relative density:	No information available.
Water solubility:	partly miscible.
Partition coefficient (n-octanol/water):	No information available.
Autoignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	No information available.
Combustion/explosion hazards:	gas, flammable
Oxidizing properties:	None

9.2. Other information

Suitable solvents Soluble in hydrocarbons

General Product Characteristics No information available.

10. Stability and reactivity

10.1. Reactivity	Risk of ignition.
10.2. Chemical stability	No decomposition if used as directed.
10.3. Possibility of hazardous reactions	Vapours may form explosive mixture with air.
10.4. Conditions to avoid	Take precautionary measures against static discharges. Keep away from heat and flame.
10.5. Incompatible materials	Oxidizing agents.
10.6. Hazardous decomposition products	None under normal use.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity	LC50/inhalation/2h/mouse = 680 mg/l. LC50/inhalation/4h/rat = 658 mg/l. Butane (CAS 106-97-8) Inhalation LC50 Rat = 658 mg/L 4 h (IUCLID)
Skin corrosion/irritation	Not irritating when applied to human skin.
Serious eye damage/eye irritation	No eye irritation.
Respiratory / Skin Sensitisation	None.
Carcinogenicity	Not classifiable as a human carcinogen.
Germ cell mutagenicity	No data available.
Reproductive toxicity	No data available.
Specific target organ toxicity (single exposure)	No data available.
Specific target organ toxicity (repeated exposure)	No data available.
Aspiration hazard	No aspiration toxicity classification.

Human experience No data is available on the product itself. Excessive exposures may affect human health, as follows: Cough..

12. Ecological information

12.1. Toxicity LC50/96h/fish > 1000 mg/l.

12.2. Persistence and degradability No data is available on the product itself.

12.3. Bioaccumulative potential No information available.

12.4. Mobility in soil The product evaporates readily. Not expected to adsorb on soil.

12.5. Results of PBT and vPvB assessment This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

12.6. Other adverse effects No information available.

13. Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products Do not put residues of product into household waste. It should be given in the original package to the official waste disposal authorities. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on naked flame or any incandescent material. European Waste catalogue code (EWC-code): 16 05 04 - gefährliche Stoffe enthaltende Gase in Druckbehältern (einschliesslich Halonen).

Contaminated packaging Offer rinsed packaging material to local recycling facilities.

14. Transport information

ADR/RID Proper shipping name AEROSOLS
UN No 1950.
Class 2.
ADR/RID-Labels 2.1.
Classification code 5F.
Risk No. 23.
Limited quantity 1 L.
Tunnel code D

IMO	Proper shipping name Aerosols UN No 1950. Class 2. Packing group -. ADR/RID-Labels 2.1. Limited quantity Siehe SV277. EmS F-D, S-U. Marine Pollutant no
ICAO	Proper shipping name Aerosols, flammable UN No 1950. Class 2.1. Packing instruction (passenger aircraft): 203 (75 kg). Packing instruction (LQ): Y203 (30 kg G). Packing instruction (cargo aircraft): 203 (150 kg).
Further Information	None.

15. Regulatory information

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

Regulatory Information	The product is classified and labelled in accordance with Directive 1999/45/EC. The product is classified and labelled according to Regulation (EC) No. 1272/2008 (GHS/CLP).
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Butane (CAS 106-97-8)	
EU - REACH (1907/2006) - List of Registered Intermediates	Present
EU - REACH (1907/2006) - List of Registered Substances	Present
UN (United Nations) - Selected Volatile Substances Prone to Abuse	Present

15.2. Chemical safety assessment	Not required.
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16. Other information

Key or legend to abbreviations and acronyms	CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS/CLP) DSD/DPD: Classification according to EU Directives 67/548/EEC or 1999/45/EC
Classification procedure	Classification according to Regulation (EU) 1272/2008 with the correlation table 67/548/EEC or 1999/45/EC (Annex VII of CLP).
Full text of phrases referred to under sections 2 and 3	H220: Extremely flammable gas. H222: Extremely flammable aerosol. H280: Contains gas under pressure; may explode if heated. R12: Extremely flammable.

Training advice	Provide adequate information, instruction and training for operators.
Further information	Contains odour marker: 100 ppm mixture of tert-Butyl mercaptane (CAS 75-66-1) and ethyl methanesulphonate (CAS 62-50-0).
Instructions for use	Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep away from children.
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification.