

EU safety data sheet

Trade name: Multigas 300, Multigas Jumbo

Product no.: 35510_1500000045_1500003091

Current version : 2.0.0, issued: 26.02.2021

Replaced version: 1.1.0, issued: 03.07.2020

Region: GB

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

1.1 Product identifier

Trade name

Multigas 300, Multigas Jumbo

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

Relevant identified uses of the substance or mixture

Fuel gas

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address

ROTHENBERGER Industrial GmbH
Sodener Strasse 47
65779 Kelkheim

Telephone no. +49 (0) 61 95 / 9981 - 0
Fax no. +49 (0) 6195 / 9981 - 7910
e-mail info-diy@rothenberger.com

Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):
+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Flam. Gas 1A; H220

Press. Gas compr.; H280

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

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

Hazard pictograms



GHS02

Signal word

Danger

Hazard statement(s)

H220

Extremely flammable gas.

H280

Contains gas under pressure; may explode if heated.

Precautionary statement(s)

P101

If medical advice is needed, have product container or label at hand.

EU safety data sheet

Trade name: Multigas 300, Multigas Jumbo

Product no.: 35510_1500000045_1500003091

Current version : 2.0.0, issued: 26.02.2021

Replaced version: 1.1.0, issued: 03.07.2020

Region: GB

P102	Keep out of reach of children.
P103	Read label before use.
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.
P410+P403	Protect from sunlight. Store in a well-ventilated place.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Labelling information

It is allowed to use the reduced labelling for gas containers for propane, butane or liquefied petroleum gas (LPG) based on Annex I, point 1.3.2 (EC Regulation 1272/2008 Annex I, 1.3.4).

2.3 Other hazards

PBT assessment
No data available.

vPvB assessment
No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name	Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration
1	butane		%
	106-97-8 203-448-7 601-004-00-0 -	Flam. Gas 1A; H220 Press. Gas; H280	>= 50.00 - < 70.00 Vol%
2	propane		pls. refer to footnote (1)
	74-98-6 200-827-9 601-003-00-5 -	Flam. Gas 1A; H220 Press. Gas compr.; H280	>= 25.00 - < 50.00 Vol%
3	isobutane		
	75-28-5 200-857-2 601-004-00-0 -	Flam. Gas 1A; H220 Press. Gas liq.; H280	>= 5.00 - < 10.00 Vol%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

(1) Aberrant from/in addition to the classification set out in Annex VI, this substance is classified according to European Regulation (EC) No 1272/2008 (CLP), Article 4 (3), paragraph 2.

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	C, U	-	-	-

Full text for the notes: pls. see section 16 "Notes relating to the identification, classification and labelling of substances ((EC) No 1272/2008, Annex VI)".

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove affected person from danger area, lay him down. If the patient is likely to become unconscious, place and transport in stable sideways position. In case of persisting adverse effects, consult a physician.

Trade name: Multigas 300, Multigas Jumbo

Product no.: 35510_1500000045_1500003091

Current version : 2.0.0, issued: 26.02.2021

Replaced version: 1.1.0, issued: 03.07.2020

Region: GB

After inhalation

Ensure supply of fresh air. If breathing is irregular or stopped, administer artificial respiration.

After skin contact

In case of frostbite, rinse with plenty of water. Do not remove clothing. Seek medical attention.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Get immediate ophthalmic treatment.

After ingestion

Get medical attention if pain still persists.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Extinguishing powder; Water spray jet; Carbon dioxide; Fight large fires with directed water spray or Alcohol-resistant foam

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon monoxide and carbon dioxide; May explode if exposed to heat. Formation of explosive mixtures with air is possible.

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing. Containers close to fire should be transferred to a safe place. Cool closed containers exposed to fire with water. Pressure increase, bursting and explosion hazard during heating. Do not inhale explosion and/or combustion byproducts.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Keep away from ignition sources. Evacuate all unprotected personnel from the danger zone. Use personal protective clothing.

For emergency responders

Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions

Avoid release in the environment.

6.3 Methods and material for containment and cleaning up

Ensure adequate ventilation. Allow to vaporise.

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances. Provide good ventilation at the work area (local exhaust

EU safety data sheet

Trade name: Multigas 300, Multigas Jumbo

Product no.: 35510_1500000045_1500003091

Current version : 2.0.0, issued: 26.02.2021

Replaced version: 1.1.0, issued: 03.07.2020

Region: GB

ventilation, if necessary). Open and handle container with care. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Handle with care - avoid bumps, friction and impact.

General protective and hygiene measures

Wash hands before breaks and after work. Do not inhale gases. Do not eat, drink or smoke during work time. Keep away from food, drink and animal feeding stuffs. Avoid contact with eyes and skin.

Advice on protection against fire and explosion

Vapours can form an explosive mixture with air. Isolate from sources of heat, sparks and open flame. Take precautionary measures against electrostatic loading (earthing necessary during loading operations). Use explosion-proof equipment/fittings and non-sparking tools. Electrical equipment should be protected to the appropriate standard.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed in a cool, well-ventilated place, open and handle carefully. Protect from heat and direct sunlight. Protect from temperatures over 50°C.

Recommended storage temperature

Value < 50 °C

Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products

Substances to be avoided, see section 10.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	butane	106-97-8	203-448-7
List of approved workplace exposure limits (WELs) / EH40			
Butane			
	WEL short-term (15 min reference period)	1810 mg/m ³	750 ppm
	WEL long-term (8-hr TWA reference period)	1450 mg/m ³	600 ppm
	Comments	Carc, (only applies if Butane contains more than 0.1% of buta-1,3-diene)	

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, local exhaust at the work station if necessary.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Tightly fitting safety glasses (EN 166).

Hand protection

Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other

Chemical-resistant work clothes.

EU safety data sheet

Trade name: Multigas 300, Multigas Jumbo

Product no.: 35510_1500000045_1500003091

Current version : 2.0.0, issued: 26.02.2021

Replaced version: 1.1.0, issued: 03.07.2020

Region: GB

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation	
gas	
Form/Colour	
Compressed liquified gas	
colourless	
Odour	
characteristic	
pH value	
No data available	
Boiling point / boiling range	
Value	-44 °C
Source	supplier
Melting point/freezing point	
No data available	
Decomposition temperature	
No data available	
Flash point	
Value	-97 °C
Source	supplier
Ignition temperature	
Value	365 °C
Source	supplier
Explosive properties	
This product is not explosive. In and after use danger of production of inflammable compounds.	
Flammability	
No data available	
Lower explosion limit	
Value	1.5 % vol
Source	supplier
Upper explosion limit	
Value	10.9 % vol
Source	supplier
Vapour pressure	
Value	8300 hPa
Reference temperature	20 °C
Source	supplier
Relative vapour density	
No data available	
Relative density	
No data available	
Density	
No data available	
Solubility in water	

EU safety data sheet

Trade name: Multigas 300, Multigas Jumbo

Product no.: 35510_1500000045_1500003091

Current version : 2.0.0, issued: 26.02.2021

Replaced version: 1.1.0, issued: 03.07.2020

Region: GB

Source	supplier
Comments	insoluble

Solubility
No data available

Partition coefficient n-octanol/water (log value)
No data available

Viscosity
No data available

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

Risk of formation of explosive gas mixtures in air. Reactions with oxygen. Exothermic reactions are possible in the event of contact with incompatible substances.

10.4 Conditions to avoid

Temperatures > 50°C. Heat, naked flames and other ignition sources.

10.5 Incompatible materials

Oxidizing agents; oxidizing substances; fats and oils

10.6 Hazardous decomposition products

None, if handled according to intended use.

SECTION 11: Toxicological information

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

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	isobutane	75-28-5	200-857-2
LD50		12705	mg/kg bodyweight
Species	rat		
Source	Manufacturer		

Acute dermal toxicity
No data available

Acute inhalational toxicity
No data available

Skin corrosion/irritation
No data available

Serious eye damage/irritation
No data available

Respiratory or skin sensitisation
No data available

EU safety data sheet

Trade name: Multigas 300, Multigas Jumbo

Product no.: 35510_1500000045_1500003091

Current version : 2.0.0, issued: 26.02.2021

Replaced version: 1.1.0, issued: 03.07.2020

Region: GB

Germ cell mutagenicity
No data available
Reproduction toxicity
No data available
Carcinogenicity
No data available
STOT - single exposure
No data available
STOT - repeated exposure
No data available
Aspiration hazard
No data available

11.2 Information on other hazards

Endocrine disrupting properties

No data available.

Other information

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)
No data available
Toxicity to fish (chronic)
No data available
Toxicity to Daphnia (acute)
No data available
Toxicity to Daphnia (chronic)
No data available
Toxicity to algae (acute)
No data available
Toxicity to algae (chronic)
No data available
Bacteria toxicity
No data available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	No data available.
vPvB assessment	No data available.

12.6 Endocrine disrupting properties

No data available.

EU safety data sheet

Trade name: Multigas 300, Multigas Jumbo

Product no.: 35510_1500000045_1500003091

Current version : 2.0.0, issued: 26.02.2021

Replaced version: 1.1.0, issued: 03.07.2020

Region: GB

12.7 Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

dispose of in accordance with local regulation.

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Compressed gas packaging under pressure. Do not open by force. Do not heat above 50°C. Dispose of compressed gas packagings only if completely discharged. Do not burn empty compressed gas packagings. Do not pierce, cut or weld uncleaned containers.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

Class	2
Classification code	5F
UN number	UN2037
Proper shipping name	RECEPTACLES, SMALL, CONTAINING GAS
Tunnel restriction code	D
Label	2.1

14.2 Transport IMDG

Class	2
UN number	UN2037
Proper shipping name	RECEPTACLES, SMALL, CONTAINING GAS
EmS	F-D, S-U
Label	2.1

14.3 Transport ICAO-TI / IATA

Class	2.1
UN number	UN2037
Proper shipping name	Receptacles, small, containing gas
Label	2.1

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

To be transported always in closed, upright and safe containers. Make sure that persons handling these containers are aware of the rules of conduct in case of incident or spillage.

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

EU safety data sheet

Trade name: Multigas 300, Multigas Jumbo

Product no.: 35510_1500000045_1500003091

Current version : 2.0.0, issued: 26.02.2021

Replaced version: 1.1.0, issued: 03.07.2020

Region: GB

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.
--

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES	
---	--

The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.	No 40
--	-------

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances	
---	--

This product is subject to Part I of Annex I, risk category:	P2
--	----

Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product.
--

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Further information

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

Sources of key data used to compile the data sheet:

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

National Threshold Limit Values of the corresponding countries as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Notes relating to the identification, classification and labelling of substances and mixtures ((EC) No 1272/2008, Annex VI)

- | | |
|---|--|
| C | Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers. |
| U | When put on the market gases have to be classified as 'Gases under pressure', in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case. |

Creation of the safety data sheet

UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de

This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

Document protected by copyright. Alterations or reproductions require the express written permission of UMCO GmbH.

Prod-ID 757032