

	<b>SAFETY DATASHEET</b>	Page : 1/11
		Revised edition n° : 10.0
		Revision date : 08/2018
<b>Methylacetylene</b>		<b>MTG081</b>

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

### 1.1. Product identifier

Trade name	Methylacetylene
Chemical description	Methylacetylene
CAS N°	74-99-7
CE N°	200-828-4
Index N°	--
Registration n°	Registration deadline not expired
Chemical formula	C <sub>3</sub> H <sub>4</sub> or CH <sub>3</sub> -C≡CH

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

Relevant identified uses	Industrial and professional Test gas/Calibration gas Chemical reaction / Synthesis Laboratory use Polymer production. Contact supplier for more information on uses
Uses advised against	Consumer use not recommended

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

Company identification	MULTIGAS Route de l'Industrie 102 CH-1564 Domdidier
Phone number	+41 (0) 26 676 94 94
E-mail address	<a href="mailto:info@multigas.ch">info@multigas.ch</a>

### 1.4. Emergency telephone numbers


145 (Toxicology Centre Zurich) or +41 (0) 44 251 51 51  
 +41 (0) 26 676 94 94 (Multigas)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Physical hazards	Flammable gases, Category 1	H220
	Chemically Unstable gases, Category B	H231

	<b>SAFETY DATASHEET</b>	Page : 2/11
		Revised edition n° : 10.0
		Revision date : 08/2018
<b>Methylacetylene</b>		<b>MTG081</b>




Gases under pressure : Liquefied gas H280

Specific target organ toxicity — Single exposure, Category 3 H335

For the complete H-sentences texts mentioned in that chapter, refer to Section 16

## 2.2. Label elements

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

<b>Hazard pictograms</b>	  										
	GHS02      GHS04      GHS07										
<b>Signal word</b>	Danger										
<b>Hazard statements</b>	<table border="0"> <tr> <td style="padding-right: 20px;">H220</td> <td>Extremely flammable gas</td> </tr> <tr> <td>H231</td> <td>May react explosively even in the absence of air at elevated pressure and/or temperature</td> </tr> <tr> <td>H280</td> <td>Contains gas under pressure; may explode if heated</td> </tr> <tr> <td>H335</td> <td>May cause respiratory irritation</td> </tr> </table>	H220	Extremely flammable gas	H231	May react explosively even in the absence of air at elevated pressure and/or temperature	H280	Contains gas under pressure; may explode if heated	H335	May cause respiratory irritation		
H220	Extremely flammable gas										
H231	May react explosively even in the absence of air at elevated pressure and/or temperature										
H280	Contains gas under pressure; may explode if heated										
H335	May cause respiratory irritation										
<b>Precautionary statements</b>	<table border="0"> <tr> <td style="padding-right: 20px;">P202</td> <td>Do not handle until all safety precautions have been read and understood</td> </tr> <tr> <td>P210</td> <td>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking</td> </tr> <tr> <td>P377</td> <td>Leaking gas fire: Do not extinguish, unless leak can be stopped safely</td> </tr> <tr> <td>P381</td> <td>In case of leakage, eliminate all ignition source</td> </tr> <tr> <td>P410+403</td> <td>Protect from sunlight. Store in a well-ventilated place</td> </tr> </table>	P202	Do not handle until all safety precautions have been read and understood	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 source	P410+403	Protect from sunlight. Store in a well-ventilated place
P202	Do not handle until all safety precautions have been read and understood										
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 source										
P410+403	Protect from sunlight. Store in a well-ventilated place										


## 2.3. Other hazards

None

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name	Product identifier	Concentration	Classification
Methylacetylene	(CAS-No.) 74-99-7 (EC-No.) 200-828-4 (EC Index-No.) --- (Registration-No.) --	<= 100%	Flam. Gas 1, H220 Chem. Unst. Gas B, H231 Press. Gas (Liq.), H280 STOT SE 3, H335

	<b>SAFETY DATASHEET</b>	Page : 3/11
		Revised edition n° : 10.0
		Revision date : 08/2018
<b>Methylacetylene</b>		<b>MTG081</b>

For the complete H-sentences texts mentioned in that chapter, refer to Section 16

Contains no other components or impurities which will influence the classification of the product

### **3.2. Mixtures**

Not established

## **SECTION 4: First aid measures**

### **4.1. Description of first aid measures**

<b>General advice</b>	See a doctor. Show this safety data sheet to the attending physician
<b>In case of inhalation</b>	In case of inhalation, remove the person from the contaminated area. In case of respiratory arrest, give artificial respiration. See a doctor
<b>In case of skin contact</b>	Remove contaminated clothing and shoes immediately. Wash with soap and plenty of water. Take victim immediately to hospital. See a doctor
<b>In case of eyes contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a doctor
<b>In case of ingestion</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. See a doctor

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

Refer to section 11

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

None

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**


<b>Suitable extinguishing media</b>	Water spray or water mist. Dry powder. Carbon dioxide. Foam
<b>Unsuitable extinguishing media</b>	Do not use water jet to extinguish

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

<b>Specific hazards</b>	In case of fire or excessive heat, hazardous combustion products may be produced Exposure to fire may cause containers to rupture/explode
<b>Hazardous combustion products</b>	In case of fire or excessive heat, hazardous combustion products may be produced such as : carbon monoxide

### **5.3. Additional information**

Cool endangered receptacles with water spray jet from a protected position

	<b>SAFETY DATASHEET</b>	Page : 4/11
		Revised edition n° : 10.0
		Revision date : 08/2018
<b>Methylacetylene</b>		<b>MTG081</b>

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Avoid breathing vapours, spray mists or gases  
 Provide adequate ventilation  
 Evacuate personnel to a safe place  
 Personal protective equipment, see section 8

**6.2. Environmental precautions**

Try to stop the leak

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

Ventilate the area  
 Keep area evacuated and free from ignition sources until any spilled liquid has evaporated (ground free from frost)

**6.4. Reference to other sections**

See also sections 8 and 13

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Avoid contact with skin and eyes  
 Avoid breathing vapour or mist  
 Keep away from sources of ignition - No smoking  
 Take precautionary measures against static discharge  
 For precautions, see section 2.2

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

Store in a cool place. Keep container tightly closed in a dry and well-ventilated place  
 Content under pressure


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

None

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

Components with occupational exposure limits

	<b>SAFETY DATASHEET</b>	Page : 5/11
		Revised edition n° : 10.0
		Revision date : 08/2018
<b>Methylacetylene</b>		<b>MTG081</b>

Component	CAS N°	Exposure value type	Control parameter	Source
Methylacetylene	74-99-7	TWA	1000 ppm	SUVA: Limit values of exposure to workstations
			1650 mg/m <sup>3</sup>	
		OEL	-	SUVA: Limit values of exposure to workstations
			-	

## **8.2. Exposure controls**

### **8.2.1. Appropriate engineering controls**

Provide adequate general and local exhaust ventilation  
 Gas detectors should be used when flammable / toxic gases / vapours are likely to be released

### **8.2.2. Individual protection measures, e.g. personal protective equipment**

#### **Eye/face protection**

Wear goggles and a face shield when transfilling or breaking transfer connections. Standard EN 166

#### **Skin / hand protection**

Wear protective gloves when handling gas cylinders. Standard EN 388- Protective gloves against mechanical hazards

Wear cold insulating gloves when transferring or disconnecting transfer lines Standard EN 511 - Insulating gloves against cold

Wearing chemical resistant gloves Standard EN 374-Protective gloves against chemicals

#### **For short-term use**

Material: Nitrile rubber  
 Penetration time:> 60 min  
 Glove thickness: 0.4 mm

#### **For long-term use**

Material: Fluoroelastomer  
 Penetration time:> 480 min  
 Glove thickness: 0.7 mm

Have appropriate, chemical-resistant protective clothing ready for use in emergencies

#### **Respiratory protection**

When the risk assessment shows that the use of respirable respirators is appropriate, use a full face mask with EN 14387 multipurpose cartridge. If the mask is the only means of protection, use a full face respirator. Use NIOSH (US) or CEN (EU) tested and approved equipment

### **8.2.3. Environmental exposure controls**

-

	<b>SAFETY DATASHEET</b>	Page : 6/11
		Revised edition n° : 10.0
		Revision date : 08/2018
<b>Methylacetylene</b>		<b>MTG081</b>

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

• Physical state at 20°C / 101.3kPa	Gas
• Colour	Colourless
Odour	No data available
Odour threshold	No data available
pH	No data available
Melting point / Freezing point	-103°C
Boiling point	-23.2°C
Flash point	-51°C (closed cup)
Evaporation rate	No data available
Flammability (solid, gas)	Extremely flammable gas
Explosive limits	1.7 – 16.8%
Vapour pressure [20°C]	5.1 bar
Vapour pressure [50°C]	11.8 bar
Vapour density	No data available
Relative density, liquid (water=1)	0.67
Relative density, gas (air=1)	1.4
Water solubility	3.6 g/l
Partition coefficient n-octanol/water (Log Kow)	0.94
Auto-ignition temperature	340°C
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

### 9.2. Other information

Molar mass	40 g/mol
Critical temperature [°C]	130°C
Relative vapour density	Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No reactivity hazard other than the effects described in sub-sections below

	<b>SAFETY DATASHEET</b>	Page : 7/11
		Revised edition n° : 10.0
		Revision date : 08/2018
<b>Methylacetylene</b>		<b>MTG081</b>

### **10.2. Chemical stability**

Stable under recommended storage conditions  
 May polymerise  
 Inhibitor usually added  
 May react explosively even in the absence of air

### **10.3. Possibility of hazardous reactions**

Can form explosive mixture with air.  
 May react violently with oxidants

### **10.4. Conditions to avoid**

Keep away from heat/sparks/open flames/hot surfaces. – No smoking  
 May decompose violently at high temperature and/or pressure or in the presence of a catalyst

### **10.5. Incompatible materials**

Strong oxidisers  
 Forms explosive acetylides with copper, silver and mercury  
 Do not use alloys containing more than 65% copper  
 For additional information on compatibility refer to ISO 11114


### **10.6. Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced

## **SECTION 11: Toxicological information**

### **11.1. Chemical safety assessment**

<b>Acute toxicity</b>	Toxicological effects not expected from this product if occupational exposure limit values are not exceeded
<b>Skin corrosion/irritation</b>	No data available
<b>Serious eye damage/irritation</b>	No data available
<b>Respiratory or skin sensitisation</b>	No data available
<b>Germ cell mutagenicity</b>	No data available
<b>Carcinogenicity</b>	No data available
<b>Reproductive toxicity</b>	No data available
<b>STOT-single exposure – Target organ(s)</b>	No data available
<b>STOT-repeated exposure</b>	No data available
<b>Ingestion hazard</b>	No data available

	<b>SAFETY DATASHEET</b>	Page : 8/11
		Revised edition n° : 10.0
		Revision date : 08/2018
<b>Methylacetylene</b>		<b>MTG081</b>

**SECTION 12: Ecological information**

**12.1. Toxicity**

Assessment 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**

PBT / vPvB assessment is not available because the chemical safety assessment is not required / is not conducted

**12.6. Other adverse effects**

No data available

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**


<b>Product</b>	<p>Must not be released into the atmosphere</p> <p>Burn in a chemical incinerator equipped with an afterburner and scrubber</p> <p>Return to the supplier the product not consumed in its original container</p>
<b>Contaminated container</b>	<p>Eliminate as unused product</p> <p>Contact the supplier if instructions are needed</p>
<b>OMoD Code</b>	<p>16 05 04</p> <p>Gases in pressure containers containing dangerous substances</p>

**SECTION 14: Transport information**

**14.1. UN number**

Transport par road/rail ADR / RID	Transport by sea IMDG	Transport by air IATA
1060	1060	1060



	<b>SAFETY DATASHEET</b>	Page : 9/11
		Revised edition n° : 10.0
		Revision date : 08/2018
<b>Methylacetylene</b>		<b>MTG081</b>

#### **14.2. UN proper shipping name**

Transport par road/rail ADR / RID	Transport by sea IMDG	Transport by air IATA
Methylacetylene and propadiene mixture, stabilized	Methylacetylene and propadiene mixture, stabilized	Methylacetylene and propadiene mixture, stabilized

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

##### Labelling



ADR/RID  
IMDG  
IATA

2.1 : Flammable gases

##### **14.4. Packing group**

ADR/RID  
IMDG  
IATA

Not established

#### **14.5. Environmental hazards**

ADR/RID                      None  
IMDG                         None  
ICAO-TI / IATA-DGR     None

#### **14.6. Special precautions for user**

No data available

#### **14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable

### **SECTION 15: Regulatory information**

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

This safety data sheet complies with the requirements of Regulation (CE) No. 1907/2006

#### **15.2. Chemical safety assessment**

A CSA has not yet been carried out

	<b>SAFETY DATASHEET</b>	Page : 10/11
		Revised edition n° : 10.0
		Revision date : 08/2018
<b>Methylacetylene</b>		<b>MTG081</b>

## SECTION 16: Other information

<b>Indication of changes</b>	Revised safety data sheet in accordance with commission regulation (EU) No 2015/830
<b>Abbreviations and acronyms</b>	<p>ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road</p> <p>CAS : Chemical Abstract Service number (USA)</p> <p>CLP : Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008</p> <p>CSA : Chemical Safety Assessment</p> <p>EIGA : European Industrial Gases Association</p> <p>EINECS : European Inventory of Existing Commercial Chemical Substances</p> <p>EN : European Standard</p> <p>ATE : Acute Toxicity Estimate</p> <p>IATA : International Air Transport Association</p> <p>IMDG Code : International Maritime Dangerous Goods Code</p> <p>LC50 : Lethal Concentration to 50 % of a test population</p> <p>OMoD : Swiss Ordinance on the movement of waste</p> <p>PBT : Persistent, Bioaccumulative and Toxic</p> <p>PPE: Personal Protection Equipment</p> <p>REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006</p> <p>RID : Regulations concerning the international carriage of dangerous goods by rail</p> <p>RMM : Risk Management Measures</p> <p>STOT-SE : Specific Target Organ Toxicity - Single Exposure</p> <p>UN : United Nations</p> <p>vPvB : Very Persistent and Very Bioaccumulative</p> <p>WGK: Water Hazards Class</p>


### Full text of H, EUH and P statements used in sections 2 and 3

#### Hazard statements

H220	Extremely flammable gas
H231	May react explosively even in the absence of air at elevated pressure and/or temperature
H280	Contains gas under pressure; may explode if heated
H335	May cause respiratory irritation

#### Precautionary statements

P202	Do not handle until all safety precautions have been read and understood
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

	<b>SAFETY DATASHEET</b>	Page : 11/11
		Revised edition n° : 10.0
		Revision date : 08/2018
<b>Methylacetylene</b>		<b>MTG081</b>

P381 In case of leakage, eliminate all ignition source

P410+403 Protect from sunlight. Store in a well-ventilated place

**Disclaimer of liability**

Details given in this document have been prepared based on the most available reliable documents and are believed to be correct at the time of going to press

They do not claim to be exhaustive and should be considered as a guide