Dräger

Printed 01.09.2018

Revision 15.05.2018 (GB) Version 1.4

Calibration gas, Test gas, H2S, NO2, CO, CO2, NH3, H2, SO2, CH4, C2H4, C3H8, C4H10, C4H8, C5H12, C6H14, O2, N2-Bal [configured]

000090300104Kalibriergas\_GB\_EN

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

#### 1.1. Product identifier

Name of product Calibration gas, Test gas, H2S, NO2, CO, CO2, NH3, H2, SO2,

CH4, C2H4, C3H8, C4H10, C4H8, C5H12, C6H14, O2, N2-Bal

[configured]

Prod-Nr varous calibration gases in air (about 18% O2, N2-Bal.)

- various, see Section 16

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

#### Identified uses

#### Sector of uses [SU]

SU20 - Health services

SU2a - Mining (without offshore industries)

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU0 - Other

#### Product categories [PC]

PC0 - Other

### Process categories [PROC]

Professional:

PROC0 - Other Process or activity:

# Article categories [AC]

not applicable

#### Article categories [AC]

not applicable

#### Environmental release categories [ERC]

not applicable

### Remark

no

# Uses advised against

# Sector of uses [SU]

not determined

#### Product categories [PC]

not determined

### Process categories [PROC]

not determined

#### Article categories [AC]

not applicable

## Article categories [AC]

not applicable

# Remark

Do not use for inflating balloons.

Do not use for medical-clinical purposes.

Do not use for private purposes (household).

# Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Printed 01.09.2018

Revision 15.05.2018 (GB) Version 1.4

Calibration gas, Test gas, H2S, NO2, CO, CO2, NH3, H2, SO2, CH4, C2H4, C3H8, C4H10, C4H8, C5H12, C6H14, O2, N2-Bal [configured]

000090300104Kalibriergas\_GB\_EN

#### Recommended intended purpose(s)

Gas mixture for the calibration of sensors.

## Effect of the substance / the mixture

Gas mixture may contain toxic gases in low concentrations.

The concentrations are usually below occupational exposure limits.

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

**Distributor** Dräger Safety UK Ltd.

Ullswater Close, Blyth Riverside Business Park, UK-NE24 4RG

Blyth; Northumberland

Phone +44 1670 352891, Fax +44 1670 356266

E-Mail info@draeger.com Internet www.draeger.com

Advice Dräger Environmental Management

Phone +49 451 882 6297 Fax +49 451 882 76297 E-mail (competent person): sds@draeger.com

1.4. Emergency telephone number

Emergency advice National Poisons Information Service, West Midlands Poisons

Unit, City Hospital NHS Trust, Dudley Ro

Phone (0) 12 15 07 55 88/9

Manufacturer Dräger Safety AG & Co. KGaA

Revalstr. 1, D-23560 Lübeck

Phone +49 (0) 451/882-0, Fax +49 (0) 451/882-2080

E-Mail info@draeger.com Internet www:draeger.com

Advice Dräger Umweltmanagement

Phone +49 (0) 451 / 882-6297 Fax +49 (0) 451 / 882-76297 E-mail (competent person): sds@draeger.com

1.4. Emergency telephone number

Emergency advice Giftinformationszentrum Nord, Göttingen; Tel. (0551) 1 92 40

Phone +49 (0) 451/ 882-2395 (Dräger Werkschutz)

#### SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazard classes and Hazard

Hazard Statements Classification procedure

categories





Dräger

Printed 01.09.2018

Revision 15.05.2018 (GB) Version 1.4

Calibration gas, Test gas, H2S, NO2, CO, CO2, NH3, H2, SO2, CH4, C2H4, C3H8, C4H10, C4H8, C5H12, C6H14, O2, N2-Bal [configured]

000090300104Kalibriergas GB EN

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

Hazard classes and Hazard Hazard Statements Classification procedure

categories

Press, Gas H28

Hazard statements for physical hazards

H280 Contains gas under pressure; may explode if heated.

Hazard statements for health hazards

no

Hazard statements for environmental hazards

no

Additional hints

This mixture is classified as hazardous according to Regulation (EC) No 1272/2008 [GHS].

2.2. Label elements

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



GHS04

Signal word Warning

Hazard statements for physical hazards

H280 Contains gas under pressure; may explode if heated.

Hazard statements for health hazards

no

Hazard statements for environmental hazards

no

**Precautionary Statements** 

General

P103 Read label before use.

Prevention

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

P233 Keep container tightly closed.

Response

P376 Stop leak if safe to do so.

Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P410 + P403 Protect from sunlight. Store in a well-ventilated place.

P412 Do not expose to temperatures exceeding 50°C/122°F.

Disposal

P501 Contents / container to properly dispose and recycle

# Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Printed 01.09.2018

Revision 15.05.2018 (GB) Version 1.4

Calibration gas, Test gas, H2S, NO2, CO, CO2, NH3, H2, SO2, CH4, C2H4, C3H8, C4H10, C4H8, C5H12, C6H14, O2, N2-Bal [configured]

000090300104Kalibriergas GB EN



Physical properties

nο

Health properties

no

**Environmental properties** 

nc

Special rules for supplemental label elements for certain mixtures

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

or burn, even anter use

Additional information

Special rules on packaging

no

Special rules for labelling of plant protection products

not applicable

Remark

no

2.3. Other hazards

Adverse physicochemical effects

Caution! Container under pressure.

Adverse human health effects and symptoms

No information available.

Adverse environmental effects

no

Other adverse effects

No information available.

Information pertaining to special dangers for human and environment

No information available.

Results of PBT and vPvB assessment

No data available

# SECTION 3: Composition/information on ingredients

3.1. Substances

not applicable

3.2. Mixtures Description

not applicable

Hazardous ingredients

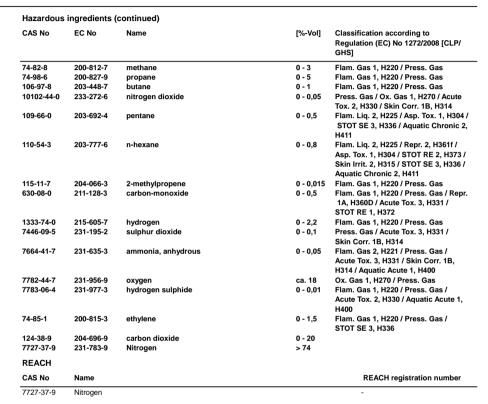


Printed 01.09.2018

Revision 15.05.2018 (GB) Version 1.4

Calibration gas, Test gas, H2S, NO2, CO, CO2, NH3, H2, SO2, CH4, C2H4, C3H8, C4H10, C4H8, C5H12, C6H14, O2, N2-Bal [configured]

000090300104Kalibriergas\_GB\_EN



#### Additional advice

no

Labelling for contents according to regulation (EC) No 648/2004, annex VII not applicable

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

### 4.1. Description of first aid measures General information

no

## In case of inhalation

Remove the casualty into fresh air and keep him immobile.

Ensure of fresh air.



# Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Printed 01.09.2018

Revision 15.05.2018 (GB) Version 1.4

Calibration gas, Test gas, H2S, NO2, CO, CO2, NH3, H2, SO2, CH4, C2H4, C3H8, C4H10, C4H8, C5H12. C6H14. O2. N2-Bal [configured]

000090300104Kalibriergas GB EN

#### In case of skin contact

No special measure necessary.

#### In case of eye contact

not determined

#### In case of ingestion

not applicable

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

Physician's information / possible symptoms

No symptoms known so far.

### Physician's information / possible dangers

No information available.

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

Treatment (Advice to doctor)

Treat symptoms.

If necessary, give oxygen.

# **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

## Suitable extinguishing media

Fire-extinguishing activities according to surrounding.

ABC powder Carbon dioxide

Water spray jet

Unsuitable extinguishing media

no

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

No information available.

#### 5.3. Advice for firefighters

#### Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply.

## Additional information

Cool endangered containers with water spray jet.

### **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

### For non-emergency personnel

Ensure adequate ventilation.

Keep away sources of ignition.

Pay attention to extension of gas especially at ground (heavier than air) and in direction of the wind.

#### For emergency responders

Ensure adequate ventilation.



Dräger

Printed 01.09.2018

Revision 15.05.2018 (GB) Version 1.4

Calibration gas, Test gas, H2S, NO2, CO, CO2, NH3, H2, SO2, CH4, C2H4, C3H8, C4H10, C4H8, C5H12, C6H14, O2, N2-Bal [configured]

000090300104Kalibriergas\_GB\_EN

#### 6.2. Environmental precautions

Suppress gases/vapours/mists with water spray jet

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

Suck off by room ventilation

#### **Additional Information**

No known toxicological effects from this product. No known ecological damage caused by this product.

#### 6.4. Reference to other sections

Safe handling: see section 7 Disposal: see section 13

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

#### Advice on safe handling

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

No special measures necessary if used correctly.

Open and handle container with care!

Use only in well-ventilated areas.

#### General protective measures

Do not inhale gases.

## Hygiene measures

At work do not eat, drink and smoke.

Work in rooms with good ventilation.

Wash hands before breaks and after work.

## Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking

The product is not combustible, but supports burning.

Pay attention to general rules of internal fire prevention.

Avoid effect of heat.

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

#### Requirements for storage rooms and vessels

Keep in closed original container.

Ventilate store-rooms thoroughly.

## Advice on storage compatibility

Do not store with chemicals.

Do not store together with oxidizing agents.

Store only in original container at cool and aired place and at distance to acids and reducing materials.

# Further information on storage conditions

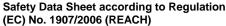
Keep container tightly closed, store at cool and aired place, open and handle carefully.

Protect compressed gas-bottles from falling down.

Storage temperature may not exceed 50°C (=122°F).

# Information on storage stability

In enclosed original container and at storage temperature of 25°C maximum product keeps stabile for at least 12 months.



Printed 01.09.2018

Revision 15.05.2018 (GB) Version 1.4

Calibration gas, Test gas, H2S, NO2, CO, CO2, NH3, H2, SO2, CH4, C2H4, C3H8, C4H10, C4H8, C5H12, C6H14, O2, N2-Bal [configured]

000090300104Kalibriergas GB EN

Storage group

7.3. Specific end use(s)

Recommendation(s) for intended use

not determined

Particular industry solution(s) for intended use

not applicable

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

### 8.1. Control parameters

Ingredients with occupational exposure limits to be monitored

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
7664-41-7	Ammonia	8 hours Short-term	18 25	25 35	UK
10102-44-0	nitrogen dioxide	8 hours Short-term	0,96 1,91	0,5 1	EU
10102-44-0	nitrogen dioxide	8 hours Short-term	[5,7] [9,6]	[3] [5]	UK
630-08-0	carbon-monoxide	8 hours Short-term	35 232	30 200	UK
7783-06-4	hydrogen sulphide	8 hours Short-term	7 14	5 10	UK
124-38-9	carbon dioxide	8 hours	9000	5000	EU
124-38-9	carbon dioxide	8 hours Short-term	9150 27400	5000 15000	UK
7664-41-7	Ammonia	EU, 8 hours Short-term	14 36	20 50	OEL
109-66-0	pentane	8 hours	3000	1000	EU
109-66-0	pentane	8 hours	1800	600	UK
109-66-0	pentane	8 hours	3000	1000	IR
74-85-1	ethylene	8 hours		200	IR
106-97-8	butane	8 hours Short-term	1450 1810	600 750	UK

# Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC, 2004/37/EC, 2006/15/EC or 2009/161/EU)

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
109-66-0	pentane	8 hours	3000	1000	
110-54-3	n-hexane	8 hours	72	20	
124-38-9	carbon dioxide	8 hours	9000	5000	
7664-41-7	ammonia, anhydrous	8 hours	14	20	
		Short-term	36	50	
7783-06-4	Hydrogen sulphide	8 hours	7	5	
		Short-term	14	10	

Page 7/17



Printed 01.09.2018

Revision 15.05.2018 (GB) Version 1.4

Calibration gas. Test gas. H2S. NO2, CO, CO2, NH3, H2, SO2, CH4, C2H4, C3H8, C4H10, C4H8, C5H12, C6H14, O2, N2-Bal [configured]

000090300104Kalibriergas GB EN

biological limits (TRGS 903)						
CAS No	Name	Parameter	BGW	Examination material	Test date	
110-54-3	Hexan (n-Hexan)	2,5-Hexandion plus 4,5- Dihydroxy-2-hexanon (nach Hydrolyse)	5 mg/l	U	b	
630-08-0	Kohlenstoffmonoxid (Kohlenmonoxid)	СО-НЬ	5 %; Ableitung des BGW als Höchstwert wegen akut toxischer Effekte / Gesonderte Bewertung für Raucher	В	b	

#### Additional advice

#### 8.2. Exposure controls

#### Respiratory protection

In case of insufficient ventilation or long-term effect use breathing apparatus.

Multi-purpose filter ABEK

#### Hand protection

Protective gloves against mechanical risks. Chemical hazards can not be expected under normal use.

#### Eye protection

safety goggles with side protection

### Other protection measures

Light protective clothing.

#### Thermal hazards

not known

#### Limitation and surveillance of the environment

Observe the expiry date.

### Appropriate engineering controls

not determined

# **SECTION 9: Physical and chemical properties**

9.1.	Information	on basic	physical	and c	hemical	properties

**Appearance** Colour compressed gas

colourless

Odour

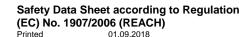
odorless or characteristic

### Odour threshold

No data available

### Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not applicable				

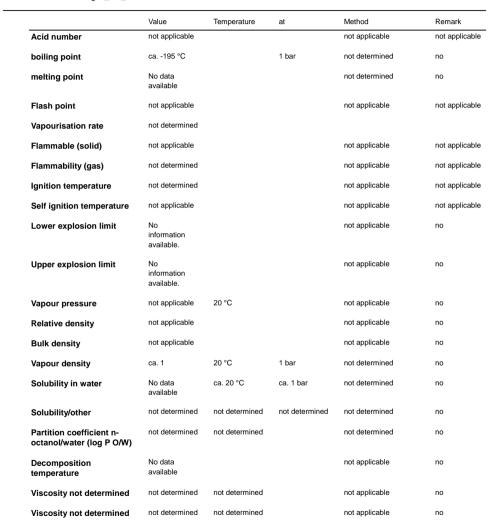


Printed

Revision 15.05.2018 (GB) Version 1.4

Calibration gas. Test gas. H2S. NO2, CO, CO2. NH3, H2, SO2, CH4, C2H4, C3H8, C4H10, C4H8, C5H12, C6H14, O2, N2-Bal [configured]

000090300104Kalibriergas GB EN



not determined

not applicable

no

no



not determined

not applicable

Solvent separation test

Solvent content



Printed 01.09.2018

Revision 15.05.2018 (GB) Version 1.4

Calibration gas, Test gas, H2S, NO2, CO, CO2, NH3, H2, SO2, CH4, C2H4, C3H8, C4H10, C4H8, C5H12, C6H14, O2, N2-Bal [configured]

000090300104Kalibriergas\_GB\_EN

	Value	Temperature	at	Method	Remark
Water content	not determined			not determined	no
Solids content	not applicable			not determined	no
Combustion value	not applicable				
Sensitiveness to impact	no			not applicable	
Oxidising properties No data available					
Explosive properties not determined					

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No hazardous reactions known.

#### 10.2. Chemical stability

9.2. Other information

not determined

## 10.3. Possibility of hazardous reactions

Gas mixture may contain toxic gases in low concentrations.

The concentrations are usually below occupational exposure limits.

not determined

## 10.4. Conditions to avoid

Danger of bursting container.

# 10.5. Incompatible materials

Substances to avoid

No data available

#### 10.6. Hazardous decomposition products

Gas mixture may contain toxic gases in low concentrations, which could be released. Decomposition products of the respective test gas components.

### Thermal decomposition

Method

not determined

Remark

not determined

#### Additional information

no

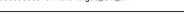
# Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Printed 01.09.2018

Revision 15.05.2018 (GB) Version 1.4

Calibration gas, Test gas, H2S, NO2, CO, CO2, NH3, H2, SO2, CH4, C2H4, C3H8, C4H10, C4H8, C5H12, C6H14, O2, N2-Bal [configured]

000090300104Kalibriergas\_GB\_EN



# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

#### Acute toxicity/Irritation/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral	not determined	not determined	not determined	no
LD50 acute dermal	not determined	not determined	not determined	no
LC50 acute inhalation	not determined	not determined	not determined	no
Skin irritation	not determined	not determined	not determined	no
Eye irritation	not determined	not determined	not determined	no
Skin sensitization	not determined	not determined	not determined	no
Sensitization respiratory system	not determined	not determined	not determined	no

# Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Subacute Toxicity	not determined	not determined	not determined	no
Subchronic Toxicity	not determined	not determined	not determined	no
Chronic Toxicity	not determined	not determined	not determined	no
Mutagenicity	not determined	not determined	not determined	no
Reproduction- Toxicity	not determined	not determined	not determined	no
Carcinogenicity	not determined	not determined	not determined	no

### Specific target organ toxicity (single exposure)

No data available

Specific target organ toxicity (repeated exposure)
No data available

# Aspiration hazard

not applicable

## Toxicity test (Additional information)

No information available.

# Experiences made from practice

No information available.

## Additional information

No known toxicological effects from this product.

No toxical dates available.





Printed 01.09.2018

Revision 15.05.2018 (GB) Version 1.4

Calibration gas, Test gas, H2S, NO2, CO, CO2, NH3, H2, SO2, CH4, C2H4, C3H8, C4H10, C4H8, C5H12, C6H14, O2, N2-Bal [configured]

000090300104Kalibriergas\_GB\_EN

Mixture not tested.

The product has not been tested. The information is derived from the properties of the individual components.

# **SECTION 12: Ecological information**

### 12.1. Toxicity

Ecotoxicologic	al effects Value	Species	Method	Validation		
Fish	not determined	not determined	not determined	no		
Daphnia	not determined	not determined	not determined	no		
Algae	not determined	not determined	not determined	no		
Bacteria	not determined	not determined	not determined	no		
12.2. Persisten	12.2. Persistence and degradability  Elimination rate Method of analysis Method Validation					
Physico-chemi degradability	cal not determined	not determined	not determined	no		
Biological degradability	not determined	not determined	not determined	no		
Degradability	not determined	not determined	not determined	no		
Biological eliminability	not determined	not determined	not determined	no		
Degradability according to V	not determined	not determined	not determined	no		

# 12.3. Bioaccumulative potential

not determined

#### 12.4. Mobility in soil

not determined

### 12.5. Results of PBT and vPvB assessment

No data available

# 12.6. Other adverse effects

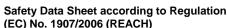
not determined

#### Behaviour in sewage plant

not determined

### Respiration inhibition of activated sluge

	Value	Method	Remark
EC 50	not determined	not determined	no



Dräger

Printed 01.09.2018

Revision 15.05.2018 (GB) Version 1.4

Calibration gas, Test gas, H2S, NO2, CO, CO2, NH3, H2, SO2, CH4, C2H4, C3H8, C4H10, C4H8, C5H12, C6H14, O2, N2-Bal [configured]

000090300104Kalibriergas\_GB\_EN



Additional ecological information				
-	Value	Method	Remark	
ос	not determined	not determined	no	
COD	not determined	not determined	no	
BOD 99.40.n.b.	not determined	not determined	no	
AOX	not determined			

Contains following heavy metals and compounds of the 76/464/EWG not applicable

### General regulation

No known ecological damage caused by this product.

If appropriate application no interferences in sewage treatment plants.

Ecological dates are not available.

### **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

Waste code No.

Name of waste

16 05 05 gases in pressure containers other than those mentioned in 16 05 04

#### Recommendations for the product

Remove in accordance with local official regulations.

#### Recommendations for packaging

Totally emptied packaging may be taken for recycling.

### Recommended cleansing agent

not applicable

#### General information

no

# **SECTION 14: Transport information**

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	1956	1956	1956
14.2. UN proper shipping name	Compressed gas, n.o.s. (Stickstoff,Sauerstoff)	Compressed gas, n.o.s. (Nitrogen, Oxygen)	Compressed gas, n.o. s. (Nitrogen, Oxygen)
14.3. Transport hazard class(es)	2.2	2.2	2.2
14.4. Packing group	J.	./.	J.
14.5. Environmental hazards	No	No	No

Page 13/17 Page 14/17

Printed 01.09.2018

15.05.2018 (GB) Version 1.4 Revision

Calibration gas, Test gas, H2S, NO2, CO, CO2, NH3, H2, SO2, CH4, C2H4, C3H8, C4H10, C4H8, C5H12, C6H14, O2, N2-Bal [configured]

000090300104Kalibriergas GB EN

#### 14.6. Special precautions for user

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

#### Land and inland navigation transport ADR/RID

Hazard label(s) 2.2

tunnel restriction code D/E

Special provisions P200

Classification code 1A

#### Transport/further information

# **SECTION 15: Regulatory information**

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

not applicable

#### Application restrictions

No information available

## Other regulations (EU)

No information available

## VOC standard

### Remark

not applicable

#### National regulations

#### Restriction of occupation

## Other regulations, restrictions and prohibition regulations

To observe: TRG 280 "General demands for gas pressure vessels; operating with gas pressure vessels

To observe: TRG 101 "Gases"

TRGS 407 "Tätigkeiten mit Gasen'

UVV "Gases" (VBG 61)

Water hazard class

self-classification

nwh - not water hazardous

#### Technical instruction air remarks

not applicable

Decree for case of interference/

Accident decree, addendum II: not named

#### 15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out

# Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Printed 01.09.2018

15.05.2018 (GB) Version 1.4 Revision

Calibration gas. Test gas. H2S. NO2, CO. CO2. NH3. H2. SO2, CH4, C2H4, C3H8, C4H10, C4H8,

C5H12, C6H14, O2, N2-Bal [configured] 000090300104Kalibriergas GB EN

### **SECTION 16: Other information**

### Training advice

not determined

#### Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

#### Further information

Partno, 6810987 (Test gas 0.9 Vol.-% n-C4H10 in Luft / air)

Partno, 6812784 (Test gas 1.35 Vol.-% C2H4 in Luft / air).

Partno, 6810988 (Test gas 0.48 Vol.-% n-C6H14 in Luft / air).

Partno, 6810687 (Test gas 100 ppm i-C4H8 in Luft / air).

Partno, 6811629 (Test gas 100 ppm i-C4H8 in Luft / air).

Partno. 6812383 (Test gas 500 ppm CO2 in Luft / air).

Partno, 6810391 (Test gas 2.5 Vol.-% CO2 in Luft / air).

Partno. 6811357 (Test gas 20 Vol.-% CO2 in Luft / air).

Partno. 6811117 (Test gas 50 ppm CO in Luft / air).

Partno. 6811354 (Test gas 250 ppm CO in Luft / air).

Partno. 6812574 (Test gas 50 ppm CO, 18 Vol.-% O2 in N2).

Partno, 6812963 (Test gas 100 ppm CO, 18 Vol.-% O2 in N2)

Partno. 6812104 (Test gas 2.5 Vol.-% CH4 in Luft / air).

Partno, 6810389 (Test gas 2 Vol.-% CH4 in Luft / air).

Partno, 6811116 (Test gas 2 Vol.-% CH4, 18 Vol.-% O2 in N2).

Partno, 6812152 (Test gas 0.9 Vol.-% C3H8, 18 Vol.-% O2 in N2).

Partno. 6812153 (Test gas 0.4 Vol.-% n-C5H12, 18 Vol.-% O2 in N2).

Partno, 6812116 (Test gas 25 ppm H2S, 100 ppm CO, 0.45 Vol.-% n-C5H12 in Luft / air).

Partno. 6811646 (Test gas 2.2 Vol.-% CH4, 18 Vol.-% O2 in N2).

Partno. 6811647 (Test gas 2.2 Vol.-% CH4, 15 ppm H2S, 18 Vol.-% O2 in N2).

Partno, 6812573 (Test gas 10 ppm H2S, 50 ppm CO, 18 Vol.-% O2 in N2).

Partno. 6813098 (Test gas 25 ppm H2S, 100 ppm CO, 2.5 Vol.-% CH4, 18 Vol.-% O2 in N2).

Partno. 6811130 (Test gas 15 ppm H2S, 50 ppm CO, 2.5 Vol.-% CH4, 18 Vol.-% O2 in N2).

Partno. 6812375 (Test gas 15 ppm H2S, 50 ppm CO, 2.5 Vol.-% CH4, 18 Vol.-% O2 in N2).

Partno. 6811131 (Test gas 15 ppm H2S, 2 Vol.-% CO2, 2.5 Vol.-% CH4, 18 Vol.-% O2 in N2).

Partno. 6812376 (Test gas 15 ppm H2S, 2 Vol.-% CO2, 2.5 Vol.-% CH4, 18 Vol.-% O2 in N2).

Partno, 6811132 (Test gas 15 ppm H2S, 50 ppm CO, 2 Vol.-% CO2, 2.5 Vol.-% CH4, 18 Vol.-% O2 in N2),

Partno. 6813099 (Test gas 5 ppm NO2, 50 ppm CO, 2 Vol.-% CO2, 2.5 Vol.-% CH4, 18 Vol.-% O2 in N2). Partno. 6812377 (Test gas 15 ppm H2S, 50 ppm CO, 2 Vol.-% CO2, 2.5 Vol.-% CH4, 18 Vol.-% O2 in N2).

Partno. 6812778 (Test gas 15 ppm H2S, 50 ppm CO, 2 Vol.-% CO2, 0.4 Vol.-% C3H8, 18 Vol.-% O2 in N2).

Partno. 6811835 (Test gas 15 ppm H2S, 50 ppm CO, 2 Vol.-% CO2, 0.45 Vol.-% n-C5H12, 18 Vol.-% O2 in N2).

Partno. 6811905 (Test gas 50 ppm CO, 2 Vol.-% CO2, 2.5 Vol.-% CH4, 18 Vol.-% O2 in N2). Partno. 6813100 (Test gas 15 ppm H2S, 50 ppm CO, 18 Vol.-% O2 in N2).

Partno. 6813101 (Test gas 50 ppm NH3, 50 ppm CO, 18 Vol.-% O2 in N2).

Partno, 6813103 (Test gas 10 ppm NO2, 50 ppm CO, 2.5 Vol.% CH4, 18 Vol.% O2 in N2), Partno, 6810761 (Test gas 0.75 Vol.-% n-C5H12 in Luft / air)...

Partno. 6813237 (Test gas 0,6 Vol.-% C3H8 in Luft / air).

Partno, 6813238 (Test gas 0.1 Vol.-% C3H8 in Luft / air).

Partno, 6812389 (Test gas 0.4 Vol.-% C3H8 in Luft / air).

Partno. 6812788 (Test gas 0.75 Vol.-% C3H8 in Luft / air).

Partno, 6810390 (Test gas 0.9 Vol.-% C3H8 in Luft / air).

Partno. 6811118 (Test gas 0.9 Vol.-% C3H8 in Luft / air).

Partno. 6813239 (Test gas 20,9 Vol.-% O2 in N2,

Zero Air, < 1ppm THC).

Partno. 6811952 (Test gas 5 ppm NO2 in Luft).

Partno. 6810388 (Test gas 2 Vol.-% H2 in Luft / air).

Partno. 6811955 (Test gas 1000 ppm H2 in Luft / air).



Page 15/17 Page 16/17



Printed 01.09.2018

Revision 15.05.2018 (GB) Version 1.4

Calibration gas, Test gas, H2S, NO2, CO, CO2, NH3, H2, SO2, CH4, C2H4, C3H8, C4H10, C4H8, C5H12, C6H14, O2, N2-Bal [configured]

000090300104Kalibriergas\_GB\_EN

Partno, 4594644 (Test gas 3500 ppm CO in air).

Partno. 4594594, 4594635 (Test gas CH4 <2,5%, 100 ppm CO in air).

Sachnummer 6813758 (Kalibriergas 4 Vol.-% O2 in N2)

Sachnr. 6813696(Kalibriergas 50 ppm CO, 10 ppm SO2, 18 Vol.-% O2 in N2).

Sachnr. 6814027 (Kalibriergas 0.75 Vol.-% n-C5H12, 50 ppm CO, 18 Vol.-%O2 in N2).

Sachnr. 6813806 (Kalibriergas 15 ppm H2S, 50 ppm CO, 2 Vol.-% CO2, 0,45 Vol.-% n-C5H12, 18 Vol.-% O2 in N2)

Sachnr. 6813759 (Kalibriergas 15 ppm H2S, 100 ppm CO, 2.2 Vol.-% CH4, 18 Vol.-% O2 in N2).

Sachnr. 5239065 (Kalibriergas 0,3 Vol.-% CO2 in Luft / air).

Sachnr. 6814028 (Kalibriergas 25 ppm H2S, 100 ppm CO, 2.5 Vol.-% CH4, 18 Vol.-% O2 in N2)

Sachnr. 6813685 (Kalibriergas 5 ppm i-C4H8 in Luft / air).

Sachnr. 6814194 (Kalibriergas 25 ppm H2S, 100 ppm CO, 1,1 Vol.-% C3H8, 18 Vol.-% O2 in N2).

Sachnr. 6814195 (Kalibriergas 100 ppm CO, 18 Vol.-% O2 in N2).

Sachnr. 6814196 (Kalibriergas 1,1 Vol.-% C3H8 in Luft / air).

Sachnr. 6814047 (Kalibriergas 50 ppm CO, 2% CO2, 0,4 % C3H8, 18 Vol.-% O2 in N2).

Sachnr. 6814048 (Kalibriergas 2,5 ppm SO2 in Luft / air).

Sachnr. 6814049 (Kalibriergas 10 ppm SO2 in Luft / air).

Extremely flammable gas.

Very toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

The information contained herein is based on the state of our knowledge. It characterizes the product with regard

to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Indication of changes: "!" = Data changed compared with the previous version.

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 1.3

# Sources of key data used

not determined

H220

H400

H411

	Extremely naminable gas:
H221	Flammable gas.
H225	Highly flammable liquid and vapour.
H270	May cause or intensify fire; oxidiser.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
H360D	May damage fertility or the unborn child (state specific effect if known) (state route of exposure if it is
	conclusively proven that no other routes of exposure cause the hazard).
H361f	Suspected of damaging fertility or the unborn child (state specific effect if known) (state route of exposure if it
	is conclusively proven that no other routes of exposure cause the hazard).
H372	Causes damage to organs (or state all organs affected, if known) through prolonged or repeated exposure
	(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H373	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure
	(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

Page 17/17