

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]

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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 various 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).

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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 categories Hazard Statements Classification procedure

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

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
--------------------------------------	-------------------	--------------------------

Press. Gas	H280	
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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.

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Supplemental Hazard information (EU)

Physical properties

no

Health properties

no

Environmental properties

no

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.

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

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Hazardous ingredients (continued)

CAS No	EC No	Name	[%-Vol]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
74-82-8	200-812-7	methane	0 - 3	Flam. Gas 1, H220 / Press. Gas
74-98-6	200-827-9	propane	0 - 5	Flam. Gas 1, H220 / Press. Gas
106-97-8	203-448-7	butane	0 - 1	Flam. Gas 1, H220 / Press. Gas
10102-44-0	233-272-6	nitrogen dioxide	0 - 0,05	Press. Gas / Ox. Gas 1, H270 / Acute Tox. 2, H330 / Skin Corr. 1B, H314
109-66-0	203-692-4	pentane	0 - 0,5	Flam. Liq. 2, H225 / Asp. Tox. 1, H304 / STOT SE 3, H336 / Aquatic Chronic 2, H411
110-54-3	203-777-6	n-hexane	0 - 0,8	Flam. Liq. 2, H225 / Repr. 2, H361f / Asp. Tox. 1, H304 / STOT RE 2, H373 / Skin Irrit. 2, H315 / STOT SE 3, H336 / Aquatic Chronic 2, H411
115-11-7	204-066-3	2-methylpropene	0 - 0,015	Flam. Gas 1, H220 / Press. Gas
630-08-0	211-128-3	carbon-monoxide	0 - 0,5	Flam. Gas 1, H220 / Press. Gas / Repr. 1A, H360D / Acute Tox. 3, H331 / STOT RE 1, H372
1333-74-0	215-605-7	hydrogen	0 - 2,2	Flam. Gas 1, H220 / Press. Gas
7446-09-5	231-195-2	sulphur dioxide	0 - 0,1	Press. Gas / Acute Tox. 3, H331 / Skin Corr. 1B, H314
7664-41-7	231-635-3	ammonia, anhydrous	0 - 0,05	Flam. Gas 2, H221 / Press. Gas / Acute Tox. 3, H331 / Skin Corr. 1B, H314 / Aquatic Acute 1, H400
7782-44-7	231-956-9	oxygen	ca. 18	Ox. Gas 1, H270 / Press. Gas
7783-06-4	231-977-3	hydrogen sulphide	0 - 0,01	Flam. Gas 1, H220 / Press. Gas / Acute Tox. 2, H330 / Aquatic Acute 1, H400
74-85-1	200-815-3	ethylene	0 - 1,5	Flam. Gas 1, H220 / Press. Gas / STOT SE 3, H336
124-38-9	204-696-9	carbon dioxide	0 - 20	
7727-37-9	231-783-9	Nitrogen	> 74	

REACH

CAS No	Name	REACH registration number
7727-37-9	Nitrogen	-

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.

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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.

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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.

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Storage group 2A

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/m ³]	[ppm]	Remark
7664-41-7	Ammonia	8 hours	18	25	UK
		Short-term	25	35	
10102-44-0	nitrogen dioxide	8 hours	0,96	0,5	EU
		Short-term	1,91	1	
10102-44-0	nitrogen dioxide	8 hours	[5,7]	[3]	UK
		Short-term	[9,6]	[5]	
630-08-0	carbon-monoxide	8 hours	35	30	UK
		Short-term	232	200	
7783-06-4	hydrogen sulphide	8 hours	7	5	UK
		Short-term	14	10	
124-38-9	carbon dioxide	8 hours	9000	5000	EU
124-38-9	carbon dioxide	8 hours	9150	5000	UK
		Short-term	27400	15000	
7664-41-7	Ammonia	EU, 8 hours	14	20	OEL
		Short-term	36	50	
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	1450	600	UK
		Short-term	1810	750	

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/m ³]	[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	

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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)	CO-Hb	5 % ; Ableitung des BGW als Höchstwert wegen akut toxischer Effekte / Gesonderte Bewertung für Raucher	B	b

Additional advice

no

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 chemical properties

Appearance	Colour	Odour
compressed gas	colourless	odorless or characteristic

Odour threshold

No data available

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not applicable				

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	Value	Temperature	at	Method	Remark
Acid number	not applicable			not applicable	not applicable
boiling point	ca. -195 °C		1 bar	not determined	no
melting point	No data available			not determined	no
Flash point	not applicable			not applicable	not applicable
Vapourisation rate	not determined				
Flammable (solid)	not applicable			not applicable	not applicable
Flammability (gas)	not determined			not applicable	not applicable
Ignition temperature	not determined			not applicable	not applicable
Self ignition temperature	not applicable			not applicable	not applicable
Lower explosion limit	No information available.			not applicable	no
Upper explosion limit	No information available.			not applicable	no
Vapour pressure	not applicable	20 °C		not applicable	no
Relative density	not applicable			not applicable	no
Bulk density	not applicable			not applicable	no
Vapour density	ca. 1	20 °C	1 bar	not determined	no
Solubility in water	No data available	ca. 20 °C	ca. 1 bar	not determined	no
Solubility/other	not determined	not determined	not determined	not determined	no
Partition coefficient n-octanol/water (log P O/W)	not determined	not determined		not determined	no
Decomposition temperature	No data available			not applicable	no
Viscosity not determined	not determined	not determined		not applicable	no
Viscosity not determined	not determined	not determined		not applicable	no
Solvent separation test	not determined			not determined	no
Solvent content	not applicable			not applicable	no

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NH₃, H₂, SO₂, CH₄, C₂H₄, C₃H₈, C₄H₁₀, C₄H₈,
C₅H₁₂, C₆H₁₄, O₂, N₂-Bal [configured]
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Dräger

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C₅H₁₂, C₆H₁₄, O₂, N₂-Bal [configured]
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Dräger

	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					
9.2. Other information Gas mixture may contain toxic gases in low concentrations. The concentrations are usually below occupational exposure limits.					

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions known.

10.2. Chemical stability

not determined

10.3. Possibility of hazardous reactions

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

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 toxicological data available.

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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

Ecotoxicological 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. Persistence and degradability

	Elimination rate	Method of analysis	Method	Validation
Physico-chemical degradability	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 WRMG	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 sludge

	Value	Method	Remark
EC 50	not determined	not determined	no

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Additional ecological information

	Value	Method	Remark
OC	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	./.	./.	./.
14.5. Environmental hazards	No	No	No

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14.6. Special precautions for user
no

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
no

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
no

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/ remarks Accident decree, addendum II: not named.

15.2. Chemical Safety Assessment

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

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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).

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

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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).

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 Extremely flammable 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).
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.