

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

Printed 27.02.2017
revision 21.02.2017 (GB) Version 1.3

**Calibration gas, Test gas, Kalibriergas NH3,
HCN, Cl2, NO2, C2H4O, PH3, HCl, SO2, NO, N2O,
THT, N2-Bal [configured]**
000090300107Kalibriergas_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, Kalibriergas NH3, HCN, Cl2, NO2, C2H4O, PH3, HCl, SO2, NO, N2O, THT, N2-Bal [configured]
Prod-Nr various calibration gases in nitrogen
- 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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THT, N2-Bal [configured]**
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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 67/548/EEC or 1999/45/EC

no

R-phrases

no

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Additional hints

The preparation is not classified as hazardous according to Directive 1999/45/EC.

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

Hazard classes and Hazard Hazard Statements Classification procedure categories

Press. Gas H280

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

CAS No	EC No	Name	[%-Vol]	Classification according to 67/548/EEC
74-90-8	200-821-6	hydrogen cyanide	0 - 0,01	F+ R12; T+ R26; N R50-53
10102-44-0	233-272-6	nitrogen dioxide	0 - 0,01	O R8; T+ R26; C R34

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Hazardous ingredients (continued)

CAS No	EC No	Name	[%-Vol]	Classification according to 67/548/EEC
110-01-0	203-728-9	tetrahydrothiophene	0 - 0,01	F R11; Xn R20/21/22; Xi R36/38; R52-53
7446-09-5	231-195-2	sulphur dioxide	0 - 0,01	T R23; C R34
7664-41-7	231-635-3	ammonia, anhydrous	0 - 0,1	R10; T R23; C R34; N R50
7782-50-5	231-959-5	chlorine	0 - 0,01	O R8; T R23; Xi R36/37/38; N R50
7647-01-0	231-595-7	hydrogen chloride	0 - 0,1	T R23; C R35
75-21-8	200-849-9	oxirane	0 - 0,01	F+ R12; R6; Carc.Cat.2 R45; Muta.Cat.2 R46; T R23; Xi R36/37/38
7803-51-2	232-260-8	phosphine	0 - 0,01	F+ R12; R17; T+ R26; C R34; N R50
7727-37-9	231-783-9	Nitrogen	> 99	-
10102-43-9	233-271-0	Nitric oxide	0 - 0,01	-
10024-97-2	233-032-0	Dinitrogen oxide	0 - 0,01	-

CAS No	EC No	Name	[%-Vol]	Classification according to Regulation (EC) No 1272/2008 [CLP/ GHS]
74-90-8	200-821-6	hydrogen cyanide	0 - 0,01	Flam. Liq. 1, H224 / Acute Tox. 2, H330 / Aquatic Acute 1, H400 / Aquatic Chronic 1, H410
10102-44-0	233-272-6	nitrogen dioxide	0 - 0,01	Press. Gas / Ox. Gas 1, H270 / Acute Tox. 2, H330 / Skin Corr. 1B, H314
110-01-0	203-728-9	tetrahydrothiophene	0 - 0,01	Flam. Liq. 2, H225 / Acute Tox. 4, H332 / Acute Tox. 4, H312 / Acute Tox. 4, H302 / Eye Irrit. 2, H319 / Skin Irrit. 2, H315 / Aquatic Chronic 3, H412
7446-09-5	231-195-2	sulphur dioxide	0 - 0,01	Press. Gas / Acute Tox. 3, H331 / Skin Corr. 1B, H314
7664-41-7	231-635-3	ammonia, anhydrous	0 - 0,1	Flam. Gas 2, H221 / Press. Gas / Acute Tox. 3, H331 / Skin Corr. 1B, H314 / Aquatic Acute 1, H400
7782-50-5	231-959-5	chlorine	0 - 0,01	Ox. Gas 1, H270 / Press. Gas / Acute Tox. 3, H331 / Eye Irrit. 2, H319 / STOT SE 3, H335 / Skin Irrit. 2, H315 / Aquatic Acute 1, H400 M=100
7647-01-0	231-595-7	hydrogen chloride	0 - 0,1	Press. Gas / Acute Tox. 3, H331 / Skin Corr. 1A, H314
75-21-8	200-849-9	oxirane	0 - 0,01	Press. Gas / Flam. Gas 1, H220 / Carc. 1B, H350 / Muta. 1B, H340 / Acute Tox. 3, H331 / Eye Irrit. 2, H319 / STOT SE 3, H335 / Skin Irrit. 2, H315
7803-51-2	232-260-8	phosphine	0 - 0,01	Flam. Gas 1, H220 / Press. Gas / Acute Tox. 2, H330 / Skin Corr. 1B, H314 / Aquatic Acute 1, H400
7727-37-9	231-783-9	Nitrogen	> 99	-
10102-43-9	233-271-0	Nitric oxide	0 - 0,01	Pess. Gas, H280 / Ox. Gas 1, H270 / Skin Corr. 1B, H330 / Acute Tox.1, H314
10024-97-2	233-032-0	Dinitrogen oxide	0 - 0,01	Oxid. Gas,1, H270 / Press. Gas, H280

REACH

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

Additional advice
no

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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.

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

Hohe Konzentrationen können Ersticken verursachen. Symptome können Verlust der Bewegungsfähigkeit und des Bewußtseins sein. Das Opfer bemerkt das Ersticken nicht.

Physician's information / possible dangers

Hohe Konzentrationen können Ersticken verursachen.

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.

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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.

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.

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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 stable for at least 12 months.

Storage group 2A

Fire class A

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
74-90-8	hydrogen cyanide	8 hours	-	-	UK
		Short-term	11	10	
7664-41-7	Ammonia	8 hours	18	25	UK
		Short-term	25	35	
7782-50-5	chlorine	8 hours			UK
		Short-term	1,5	0,5	
7446-09-5	sulphur dioxide	8 hours	[5,3]	[2]	UK
		Short-term	[13]	[5]	
10102-44-0	nitrogen dioxide	8 hours		0,2	EU
10102-44-0	nitrogen dioxide	8 hours	[5,7]	[3]	UK
		Short-term	[9,6]	[5]	
7647-01-0	hydrogen chloride	8 hours	8	5	IR
		Short-term	15	10	
7664-41-7	Ammonia	EU, 8 hours	14	20	OEL
		Short-term	36	50	
7803-51-2	phosphine	EU, 8 hours	0,14	0,1	
		Short-term	0,28	0,2	
7803-51-2	phosphine	8 hours	0,14	0,1	IR
		Short-term	0,28	0,2	
7802-51-2	phosphine	8 hours	0,14	0,1	UK
		Short-term	0,28	0,2	
75-21-8	ethylene-oxide	8 hours	10	5	IR

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Ingredients with occupational exposure limits to be monitored (continued)

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
75-21-8	ethylene-oxide	8 hours	9,2	5	UK
7647-01-0	hydrogen chloride	8 hours	2	1	UK
		Short-term	8	5	
10102-43-9	Nitric oxide	8 hours	30	25	IR
		Short-term	45	35	
10102-43-9	Nitric oxide	8 hours	31	25	UK
		Short-term	44	35	
10024-97-2	Dinitrogen oxide	8 hours	183	100	GB
10024-97-2	Dinitrogen oxide	8 hours	90	50	SG
10024-97-2	Dinitrogen oxide	8 hours	46	24	US

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
7647-01-0	hydrogen chloride	8 hours	8	5	
		Short-term	15	10	
7664-41-7	ammonia, anhydrous	8 hours	14	20	
		Short-term	36	50	
7782-50-5	chlorine	Short-term	1,5	0,5	
7803-51-2	phosphine	8 hours	0,14	0,1	
		Short-term	0,28	0,2	

biological limits (TRGS 903)

CAS No	Name	Parameter	BGW	Examination material	Test date
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.

Hand protection

Protective gloves

Eye protection

safety goggles with side protection

Other protection measures

Light protective clothing.

Thermal hazards

not known

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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 compressed gas	Colour colourless	Odour odorless or characteristic
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Odour threshold

No data available

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not applicable	not applicable	not applicable	not applicable	not applicable
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	ca. 1 g/cm3	ca. -195 °C	ca. 1 bar	not determined	no
Bulk density	not applicable			not applicable	no
Vapour density	ca. 1	20 °C	1 bar	not determined	no

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	Value	Temperature	at	Method	Remark
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
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.

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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

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	Value	Species	Method	Validation
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 toxic dates available. 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

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	Elimination rate	Method of analysis	Method	Validation
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

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

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Calibration gas, Test gas, Kalibriergas NH3, HCN, Cl2, NO2, C2H4O, PH3, HCl, SO2, NO, N2O, THT, N2-Bal [configured]
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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. (Nitrogen,)	Compressed gas, n.o.s. (Nitrogen,)	Compressed gas, n.o.s. (Nitrogen,)
14.3. Transport hazard class(es)	2.2	2.2	2.2
14.4. Packing group	./.	./.	./.
14.5. Environmental hazards	No	No	No

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

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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"
UVV "Gases" (VBG 61)
ZH 1/119 "Guidelines for Laboratories"
ZH 1/220 "Regulations on Hazardous Materials"

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.

SECTION 16: Other information

Training advice
not determined

Recommended uses and restrictions
National and local regulations concerning chemicals shall be observed.

Further information

Refer to product information paper.
Partnumber 6810387 (Test gas 100 ppm NH3 in N2)
Partnumber 6811353 (Test gas 300 ppm NH3 in N2)
Partnumber 6811352 (Test gas 50 ppm NH3 in N2)
Partnumber 6810642 (Test gas 10 ppm HCN in N2)
Partnumber 6812388 (Test gas 15 ppm HCN in N2)
Partnumber 6812103 (Test gas 5 ppm Cl2 in N2)
Partnumber 6812106 (Test gas 10 ppm Cl2 in N2)
Partnumber 6812110 (Test gas 10 ppm C2H4O in N2)
Partnumber 6810647 (Test gas 0.5 ppm PH3 in N2)
Partnumber 6812379 (Test gas 20 ppm PH3 in N2)
Partnumber 6812115 (Test gas 25 ppm HCl in N2)
Partnumber 6812107 (Test gas 10 ppm HCl in N2)
Partnumber 6810645 (Test gas 10 ppm SO2 in N2)
Partnumber 6812108 (Test gas 10 ppm NO2 in N2)
Partnumber 6810644 (Test gas 25 ppm NO in N2)
Partnumber 6810986 (Test gas 10 ppm NO in N2)
Partnumber 6812378 (Test gas 50 ppm NO in N2)
Partnumber 6812594, 4594552 (Test gas 10 ppm THT in N2)
Sachnummer 4930613 (Kalibriergas 5 ppm PH3 in N2)
Sachnummer 5239067 (Kalibriergas 100 ppm N2O in N2)

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. Previous version: 1.2

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

Printed 27.02.2017
revision 21.02.2017 (GB) Version 1.3

**Calibration gas, Test gas, Kalibriergas NH₃,
HCN, Cl₂, NO₂, C₂H₄O, PH₃, HCl, SO₂, NO, N₂O,
THT, N₂-Bal [configured]**

000090300107Kalibriergas_GB_EN

Sources of key data used

not determined

Wording of the R/H-phrases specified in chapter 3 (not the classification of the mixture!)

R 10 Flammable.
R 11 Highly flammable.
R 12 Extremely flammable.
R 17 Spontaneously flammable in air.
R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R 23 Toxic by inhalation.
R 26 Very toxic by inhalation.
R 34 Causes burns.
R 35 Causes severe burns.
R 36/37/38 Irritating to eyes, respiratory system and skin.
R 36/38 Irritating to eyes and skin.
R 45 May cause cancer.
R 46 May cause heritable genetic damage.
R 50 Very toxic to aquatic organisms.
R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 6 Explosive with or without contact with air.
R 8 Contact with combustible material may cause fire.

H220 Extremely flammable gas.
H221 Flammable gas.
H224 Extremely flammable liquid and vapour.
H225 Highly flammable liquid and vapour.
H270 May cause or intensify fire; oxidiser.
H280 Contains gas under pressure; may explode if heated.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H340 May cause genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H350 May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.