

Name: Radiometer SDS Gas 004 Page: 1/8  
Supersedes date: 2011-02-14 Revision: 2013-02-21  
Product No.: 962-/096/141/170/175/177/184 SDS-ID: GB-EN/2.0

---

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Name: Radiometer SDS Gas 004  
Product name: 962-096 Calibration Gas 2 standard  
962-141 Gas cylinder 2.5L  
962-170 Calibration gas 2, 10bar  
962-175 Calibration gas 2, 10bar  
962-177 Calibration gas 2, 10bar  
962-184 Calibration gas 2, 34bar  
Container size: 1 L  
(962-141: 2,5 L)

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

Application: Gasses for Radiometer Equipment.

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

Supplier: Radiometer Ltd.  
Manor Court  
Manor Royal, Crawley  
Crawly, West Sussex RH10 9FY  
Tel: +44 (0) 1293 517599  
www.radiometer.co.uk

Manufacturer Radiometer Medical ApS  
Åkandevvej 21  
DK-2700 Brønshøj, DENMARK  
Tel: +45 3827 2853  
Tel: +45 3827 2828  
www.radiometer.com

Responsible for safety data sheet authoring: environment@radiometer.com

### 1.4. Emergency telephone number

Emergency telephone: Emergency telephone: 112  
(+44 1293 517599)

---

# SAFETY DATA SHEET

Name: Radiometer SDS Gas 004 Page: 2/8  
Supersedes date: 2011-02-14 Revision: 2013-02-21  
Product No.: 962-/096/141/170/175/177/184 SDS-ID: GB-EN/2.0

---

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

67/548/EEC: The product is not classified.  
GHS/CLP: The product is classified: Press. Gas, Compressed;H280  
Physical and Chemical Hazards: Contains gas under pressure; may explode if heated.  
Human health: In high concentrations: May be harmful if inhaled.  
Gas or vapour displaces oxygen available for breathing (asphyxiant).  
Environment: Considering the size of the container, the environmental hazards are considered to be limited.

### 2.2. Label elements



Signal word Warning  
H280 Contains gas under pressure; may explode if heated.  
P410/403 Protect from sunlight. Store in a well-ventilated place.

### 2.3. Other hazards

PBT/vPvB: Not relevant.

---

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

The product contains: Gas.

67/548/EEC:

<u>%:</u>	<u>CAS-No.:</u>	<u>EC No.:</u>	<u>REACH Reg. No.:</u>	<u>Chemical name:</u>	<u>Hazard classification:</u>	<u>Notes:</u>
88-90	7727-37-9	231-783-9	-	Nitrogen	-	
10-12	124-38-9	204-696-9	-	Carbon dioxide	-	OEL

Notes: OEL: The substance has been assigned an exposure limit.

GHS/CLP:

<u>%:</u>	<u>CAS-No.:</u>	<u>EC No.:</u>	<u>REACH Reg. No.:</u>	<u>Chemical name:</u>	<u>Hazard classification:</u>	<u>Notes:</u>
88-90	7727-37-9	231-783-9	-	Nitrogen	Press. Gas;H280	
10-12	124-38-9	204-696-9	-	Carbon dioxide	Press. Gas;H280	

References: The full text for all R-phrases and hazard statements are displayed in section 16.

---

# SAFETY DATA SHEET

Name:	Radiometer SDS Gas 004	Page:	3/8
Supersedes date:	2011-02-14	Revision:	2013-02-21
Product No.:	962-/096/141/170/175/177/184	SDS-ID:	GB-EN/2.0

---

## SECTION 4: FIRST AID MEASURES

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

Inhalation: Move injured person into fresh air and keep person calm under observation. If necessary, seek hospital and bring these instructions. Serious cases: If not breathing, give artificial respiration.

Skin contact: No specific first aid measures noted.

Eye contact: No specific first aid measures noted.

Ingestion: Not likely, due to the form of the product. No specific first aid measures noted.

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

Symptoms/effects: See section 11 for more detailed information on health effects and symptoms.

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

Medical attention/treatments: None known.

---

## SECTION 5: FIREFIGHTING MEASURES

### **5.1. Extinguishing media**

Extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

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

Specific hazards: Containers can burst violently when heated, due to excess pressure build-up.

### **5.3. Advice for firefighters**

Protective equipment for fire-fighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

---

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Provide adequate ventilation.

Personal precautions: In case of inadequate ventilation, use respiratory protection.

### **6.2. Environmental precautions**

Environmental precautions: Not relevant considering the small amounts used.

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

Methods for cleaning up: Allow to evaporate. Provide good ventilation.

### **6.4. Reference to other sections**

References: For personal protection, see section 8.  
For waste disposal, see section 13.

---

# SAFETY DATA SHEET

Name: Radiometer SDS Gas 004 Page: 4/8  
Supersedes date: 2011-02-14 Revision: 2013-02-21  
Product No.: 962-/096/141/170/175/177/184 SDS-ID: GB-EN/2.0

---

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Safe handling advice: Observe good laboratory/industrial hygiene practices.

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

Storage conditions: Store in a cool and well-ventilated place. See storage temperature on the product label. Do not store near heat sources or expose to high temperatures. Protect against direct sunlight.

### 7.3. Specific end use(s)

Specific use(s): Not relevant.

---

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Occupational exposure limits:

<u>CAS-No.:</u>	<u>Chemical name:</u>	<u>As:</u>	<u>Exposure limits:</u>	<u>Type:</u>	<u>Notes:</u>	<u>References:</u>	
124-38-9	Carbon dioxide	-	5000 ppm	9150 mg/m <sup>3</sup>	TWA	-	EH40
		-	15000 ppm	27400 mg/m <sup>3</sup>	STEL	15min	

### 8.2. Exposure controls

Engineering measures: Provide adequate ventilation. Observe occupational exposure limits and minimise the risk of inhalation.

Respiratory equipment: In case of inadequate ventilation, use air-supplied full-mask.

Environmental Exposure Controls: Not available.

---

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance: Gas. Colourless.

Odour: Pungent.

### 9.2. Other information

Other data: Not relevant.

---

# SAFETY DATA SHEET

Name: Radiometer SDS Gas 004  
Supersedes date: 2011-02-14  
Product No.: 962-/096/141/170/175/177/184

Page: 5/8  
Revision: 2013-02-21  
SDS-ID: GB-EN/2.0

---

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Reactivity: Not known.

### 10.2. Chemical stability

Stability: Stable.

### 10.3. Possibility of hazardous reactions

Hazardous Reactions: Not available.

### 10.4. Conditions to avoid

Conditions/materials to avoid: Avoid exposure to high temperatures or direct sunlight.

### 10.5. Incompatible materials

Incompatible materials: Not known.

### 10.6. Hazardous decomposition products

Hazardous decomposition products: None known.

---

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Inhalation: In high concentrations: Laboured breathing, perspiration, severe breathing difficulties, headache and dizziness. Gas or vapour displaces oxygen available for breathing (asphyxiant).

Skin contact: Not relevant.

Eye contact: Not relevant.

Ingestion: Not likely, due to the form of the product.

Specific effects: None known.

---

# SAFETY DATA SHEET

Name: Radiometer SDS Gas 004 Page: 6/8  
Supersedes date: 2011-02-14 Revision: 2013-02-21  
Product No.: 962-/096/141/170/175/177/184 SDS-ID: GB-EN/2.0

---

## SECTION 12: ECOLOGICAL INFORMATION

### **12.1. Toxicity**

Ecotoxicity: Considering the size of the container, the environmental hazards are considered to be limited.

### **12.2. Persistence and degradability**

Degradability: Not relevant.

### **12.3. Bioaccumulative potential**

Bioaccumulative potential: Will not bio-accumulate.

### **12.4. Mobility in soil**

Mobility: No data available.

### **12.5. Results of PBT and vPvB assessment**

PBT/vPvB: Not relevant.

### **12.6. Other adverse effects**

Other adverse effects: None known.

---

## SECTION 13: DISPOSAL CONSIDERATIONS

### **13.1. Waste treatment methods**

Make sure containers are empty before discarding (explosion risk). Do not puncture or incinerate even when empty.

Empty packaging: EWC-code: 15 01 04

---

## SECTION 14: TRANSPORT INFORMATION

### **14.1. UN number**

UN-No: 1956

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

Proper Shipping Name: COMPRESSED GAS, N.O.S. (Nitrogen, Carbon dioxide)

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

Class: 2.2

### **14.4. Packing group**

PG: -

### **14.5. Environmental hazards**

Marine pollutant: No.

Environmentally Hazardous substance: No.

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

Special precautions: None known.

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

Transport in bulk: Not relevant.

---

# SAFETY DATA SHEET

Name:	Radiometer SDS Gas 004	Page:	7/8
Supersedes date:	2011-02-14	Revision:	2013-02-21
Product No.:	962-/096/141/170/175/177/184	SDS-ID:	GB-EN/2.0

---

## SECTION 15: REGULATORY INFORMATION

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

National regulation: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

Directive 98/79/EC of the European Parliament and of the Council of 27 October 1998 on in vitro diagnostic medical devices.

EH40/2005, Workplace exposure limits 2005, with amendments.

The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).

### **15.2. Chemical Safety Assessment**

CSA status: Not relevant.

---

# SAFETY DATA SHEET

Name:	Radiometer SDS Gas 004	Page:	8/8
Supersedes date:	2011-02-14	Revision:	2013-02-21
Product No.:	962-/096/141/170/175/177/184	SDS-ID:	GB-EN/2.0

---

## SECTION 16: OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

The following sections contain revisions or new statements: 1, 2.

This SDS refers to the following internal drawings:

962-096: A4-27165 rev 3

962-141: A4-26018 rev 3

962-170: A4-28932 rev 6

962-175: A4-28934 rev 4

962-177: A4-28936 rev 4

962-184: A4-32042 rev 3

### Wording of

### R-phrases/H-statements:

H280 Contains gas under pressure; may explode if heated.

---

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

Made by DHI - Environment and Toxicology, Agern Allé 5, DK-2970 Hørsholm, Denmark.  
[www.dhigroup.com](http://www.dhigroup.com).

---