

MATERIAL SAFETY DATA SHEET

OPTI Calibration Gas – Low Pressure

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name(s) OPTI Calibration Gas – Low Pressure
Product code(s) BP7162
Identified uses Laboratories
Company OPTI Medical Systems Inc.
235 Hembree Park Drive
Roswell, GA 30076, USA
Telephone 1-800-490-6784
Fax 1-770-510-4445
24 hour Emergency Phone # CHEMTREC 1-800-424-9300
Outside U.S. +(00)-1-703-527-3887
Australia +(61)-290372994
New Zealand +(64)-98010034
South Africa 0-800-983-611
United Kingdom +(44)-870-8200418

2. HAZARDS IDENTIFICATION

GHS Classification

Gases Under Pressure, Compressed gas



Pictogram
Signal Word Warning
Hazard statement(s) H280 Contains gas under pressure; may explode if heated.
Precautionary statement(s) P410+P403 Protect from sunlight. Store in a well-ventilated place.

Classification according to Regulation (EC) No 1272/2008

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008..

Classification according to EU Directives 67/548/EEC or 1999/45/EC

This substance is not classified as dangerous according to Directive 67/548/EEC.

Other hazards – none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance	CAS-No.	EC-No.	Index-No.	RTECS-No.	Concentration
Nitrogen	7727-37-9	231-783-9	-	QW9700000	80%
Oxygen	7782-44-7				14%
Carbon dioxide	124-38-9				6%

4. FIRST AID MEASURES

Description of first aid measures

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.



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IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF SWALLOWED: Rinse mouth.

Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Indication of any immediate medical attention and special treatment needed

no data available

5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides.

Advice for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

Further information

no data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wash hands thoroughly after handling.

Environmental precautions

No special environmental precautions required.

Methods and materials for containment and cleaning up

Sweep up and shovel.

Reference to other sections

For disposal see section 13

7. HANDLING AND STORAGE

Precautions for safe handling

Wash hands thoroughly after handling.

Conditions for safe storage

Keep container tightly closed.

Specific end use

no data available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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Control parameters

Component	CAS-No.	Value	Control parameters	Basis
Carbon dioxide	124-38-9	STEL	30,000 ppm (54,000 mg/m ³)	Australia. Workplace Exposure Standards for Airborne Contaminants.
		TWA	5,000 ppm (9,000 mg/m ³)	
		STEL	30,000 ppm (54,000 mg/m ³)	Canada. Alberta Occupational Health and Safety Code
		TWA	5,000 ppm (9,000 mg/m ³)	
		TWA	5,000 ppm	Canada. British Columbia OEL
		STEL	15,000 ppm	
		TWAEV	5,000 ppm (9,000 mg/m ³)	Canada. Quebec OELs
		STEV	30,000 ppm (54,000 mg/m ³)	
		TWA	5,000 ppm (9,000 mg/m ³)	Europe. Indicative occupational exposure limit values.
		STEL	15,000ppm (27,400 mg/m ³)	UK. EH40 WEL – Workplace Exposure Limits
		TWA	5,000 ppm (9,000 mg/m ³)	
		TWA	5,000 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	30,000 ppm	
		TWA	5,000 ppm (9,000 mg/m ³)	USA. OSHA – Table Z-1 Limits for Air Contaminants – 1910.1000
		STEL	30,000 ppm (54,000 mg/m ³)	
		TWA	5,000 ppm (9,000 mg/m ³)	USA. NIOSH Recommended Exposure Limits
		STEL	30,000 ppm (54,000 mg/m ³)	

Exposure controls

Handle in accordance with good industrial hygiene and safety practice.

Personal protective equipment

Respiratory protection In case of inadequate ventilation wear respiratory protection.
Skin protection Handle with gloves.
Eye/face protection Safety glasses.
Body protection Wear protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	gas
Color (Colour)	no data available
Odor (Odour)	no data available
Odor Threshold	no data available
pH	no data available
Melting point	no data available
Initial boiling point	no data available
Flash point	not applicable
Evaporation rate	no data available
Flammability	not applicable
Upper/lower flammability or explosive limits	no data available
Vapor (Vapour) pressure	no data available
Vapor density	no data available
Relative density	no data available
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Autoignition temperature	no data available
Decomposition temperature	no data available

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Viscosity	no data available
Explosive properties	no data available
Oxidizing properties	no data available

10. STABILITY AND REACTIVITY

Reactivity	no data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	no data available
Conditions to avoid	no data available
Incompatible materials	no data available
Hazardous decomposition products	Carbon oxides, Nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	no data available
Skin corrosion/irritation	no data available
Serious eye damage/eye irritation	no data available
Respiratory or skin sensitization	no data available
Germ cell mutagenicity	no data available
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	no data available
Specific Target Organ Toxicity –Single Exposure	no data available
Specific Target Organ Toxicity –Repeated Exposure	no data available
Aspiration hazard	no data available

12. ECOLOGICAL INFORMATION

Toxicity to fish	no data available
Toxicity to daphnia and other aquatic invertebrates.	no data available
Toxicity to algae	no data available
Persistence and degradability	no data available
Bioaccumulative potential	no data available
Mobility in soil	no data available
PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

13. DISPOSAL CONSIDERATIONS**Waste treatment methods**

Product	Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging	Dispose of as unused product.

Dispose of contents in accordance with local/regional/national/international regulations.

14. TRANSPORT INFORMATION

DOT (US) Not a dangerous good



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ADR/RID	Not a dangerous good
IMDG	Not a dangerous good
ICAO/IATA	Not a dangerous good

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. OTHER INFORMATION

HMS Rating

Health hazard	0	Flammability	0	Physical hazard	0
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