

MATERIAL SAFETY DATA SHEET
29 CFR 1910.1200 OSHA Hazard
Communication Rule Format
Chem-Tel 24 Hour Emergency # 1-800-255-3924

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This product contains oxygen and helium, substances subject to the Pennsylvania Worker and Community Right-To-Know Act.

PRODUCT IDENTITY

LABEL IDENTITY - Calgaz (MSA custom P/N 10059169) Calibration Check Gas, 18% Oxygen, balance Helium.

CHEMICAL NAME - Oxygen in Helium

ADDITIONAL IDENTITIES - MSA custom P/N 10059169 Calibration Gas

FORMULA - O₂ + He

APPLICABLE CHEMICAL CONTENTS

	<u>%</u>	<u>TWA</u>	<u>OSHA</u>
Oxygen (CAS 7782-44-7)	18	None	
Helium (CAS 7440-59-7)	Balance	*	*

* Helium is a simple asphyxiant

NOTE: Gas Under Pressure, 500 PSIG at 70°F, Approx. 34 Liters Gas at Atmospheric Pressure

PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR - Colorless, odorless gas

BOILING POINT - N/A*

VAPOR PRESSURE - N/A

VAPOR DENSITY (AIR = 1) - Approx. 1

SPECIFIC GRAVITY (H₂O = 1) - N/A

PERCENT VOLATILE BY VOLUME - N/A

SOLUBILITY IN WATER -

Oxygen - 3.2 cm³/100 ml (25°C)

Helium 4.9 cm³/100 ml (25°C)

* N/A - Not Applicable

PHYSICAL HAZARD INFORMATION

PHYSICAL HAZARD - Compressed gas, 500 PSIG at 70°F

CONDITIONS OR MATERIALS TO AVOID - None

FLASH POINT - N/A

LEL - N/A

UEL - N/A

EXTINGUISHING MEDIA - This gas mixture is not flammable.

SPECIAL FIRE FIGHTING PROCEDURES - See next item.

UNUSUAL FIRE AND EXPLOSION HAZARDS - Gas under pressure, 500 PSIG at 70°F. Do not exceed 120°F.

HEALTH HAZARDS

HEALTH HAZARDS - Helium is a simple asphyxiant (ACGIH 2004).

SIGNS AND SYMPTOMS OF EXPOSURE - Breathing mixtures of helium with adequate oxygen to support life modifies the voice sound so that it is higher pitched.

PRIMARY ROUTES OF ENTRY – Inhalation

TARGET ORGANS – Lungs

MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE -

EXPOSURE LIMITS – Helium is a simple asphyxiant.

CARCINOGENICITY DATA - NIOSH RTECS, OSHA, NTP or IARC does not list component gases.

EMERGENCY AND FIRST AID PROCEDURES - Remove from contaminated area to fresh air. If breathing has stopped administer artificial resuscitation. Consult physician immediately.

SAFE HANDLING AND USE

HYGIENIC PRACTICES - Avoid breathing gas.

PROTECTIVE MEASURES DURING REPAIR AND MAINTENANCE OF CONTAMINATED EQUIPMENT - N/A

PROCEDURES FOR SPILL OR LEAK CLEANUP - Ventilate area.

WASTE DISPOSAL - Do not puncture or incinerate cylinder. Before discarding cylinder, slowly release contents to a safe exhaust. Dispose of cylinder in accordance with local, state and federal regulations

STORAGE - Store in a cool, dry, well-ventilated area. Do not exceed 120°F.

CONTROL MEASURES

PERSONAL PROTECTIVE EQUIPMENT - Due to the limited amount of gas in the cylinder, and the low release rate employed in instrument calibration, respiratory protection is not indicated under conditions of intended use.

ENGINEERING CONTROLS - Mechanical ventilation is suitable.

WORK PRACTICES - Avoid breathing gas. Use in well-ventilated areas. Follow the calibration procedure detailed in the MSA instruction manual provided with the instrument under calibration.

DATE OF PREPARATION - Rev. 0, September 2004

WARNING: This is a hazardous chemical product. By following the directions and warnings provided with this product, the hazards associated with the use of this product can be greatly reduced but never entirely eliminated. Mine Safety Appliances Company makes no warranties, expressed or implied, with respect to this product and EXPRESSLY DISCLAIMS THE WARRANTY OF MERCHANTABILITY AND ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. Users assume all risks in handling, using or storing this product.