MATERIAL SAFETY DATA SHEET 29 CFR 1910.1200 OSHA Hazard Communication Rule Format Chem-Tel 24 Hour Emergency # 1-800-255-3924 MINE SAFETY APPLIANCES COMPANY P.O. Box 426 Pittsburgh, PA 15230 PHONE (412) 967-3000

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

PRODUCT IDENTITY

LABEL IDENTITY - MSA P/N 801049 Calibration Check Gas, 6.6% Methane in Nitrogen

CHEMICAL NAME - Methane, Nitrogen Mixture

ADDITIONAL IDENTITIES - MSA P/N 801049 Calibration Gas

FORMULA - CH₄ in N₂

APPLICABLE CHEMICAL CONTENTS

 Methane (CAS 74-82-8)
 TWA (CAS 74-82-8)
 None*

 Nitrogen (CAS 7727-37-9)
 Balance
 None

*Methane and Nitrogen are asphyxiants

NOTE: Gas Under Pressure, 1000 PSIG at 70°F, Approx. 100 Liters Gas at Atmospheric Pressure

PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR - Colorless, Odorless Gas

BOILING POINT - N/A* SPECIFIC GRAVITY ($H_2O = 1$) - N/A* VAPOR PRESSURE - N/A* PERCENT VOLATILE BY VOLUME - N/A*

VAPOR DENSITY (AIR = 1) - < 1

SOLUBILITY IN WATER - Methane - 9 cm³/100 ml (20°C)

Nitrogen - $2.3 \text{ cm}^3/100 \text{ ml } (0^{\circ}\text{C})$

N/A * - Not Applicable

PHYSICAL HAZARD INFORMATION

PHYSICAL HAZARD - Compressed gas, 1000 PSIG at $70^{\circ}F$

CONDITIONS OR MATERIALS TO AVOID - None

FLASH POINT - N/A

EXTINGUISHING MEDIA - This calibration gas mixture is not flammable.

SPECIAL FIRE FIGHTING PROCEDURES - See next item.

UNUSUAL FIRE AND EXPLOSION HAZARDS - Gas under pressure, 1000 PSIG at 70°F. Do not exceed 120°F.

HEALTH HAZARDS

HEALTH HAZARDS - Methane and Nitrogen are asphyxiants.

SIGNS AND SYMPTOMS OF EXPOSURE - Significant dilution of ambient air by asphyxiants causes air hunger, increased breathing frequency, drowsiness, weakness, and ringing in ears.

PRIMARY ROUTES OF ENTRY - Inhalation

TARGET ORGANS - Lungs

MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE - No Information

EXPOSURE LIMITS - None.

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

EMERGENCY AND FIRST AID PROCEDURES - Remove from exposure.

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. 6, July 2003

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.