

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

PRODUCT IDENTITY

LABEL IDENTITY - MSA P/N 710210 Calibration Check Gas, 40 ppm Hydrogen Chloride in Nitrogen
CHEMICAL NAME - Hydrogen Chloride, Nitrogen Mixture
ADDITIONAL IDENTITIES - MSA P/N 710210 Calibration Gas
FORMULA - HCl in N₂

APPLICABLE CHEMICAL CONTENTS

	<u>%</u>	<u>TWA</u>	<u>Ceiling</u>
Hydrogen Chloride (CAS 7647-01-0)	0.004	None	2 ppm(ACGIH 2011)
Nitrogen (CAS 7727-37-9)	Balance	None	

NOTE: Gas Under Pressure, 500 PSIG at 70°F, Approx. 58 Liters Gas at Atmospheric Pressure

PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR - Colorless gas (40 ppm) with a sharp pungent, irritating odor.

Following information is for Nitrogen the main component of this gas mixture

BOILING POINT - -320.4°F (-195.8 °C) SPECIFIC GRAVITY (air = 1) @70°F (21.1 °C): 0.906

VAPOR PRESSURE @70°F (21.1 °C): N/A* PERCENT VOLATILE BY VOLUME - N/A*

GAS DENSITY @32°F (0 °C) and 1 atm: 0.072 lbs/ft³ (1.153 kg/ m³)

SOLUBILITY IN WATER - HCl - 82.3% (0°C)
Nitrogen - 2.3 cm³/100 ml (0°C)

N/A - Not Applicable

PHYSICAL HAZARD INFORMATION

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

CONDITIONS OR MATERIALS TO AVOID - Avoid using when moisture or water is present.

FLASH POINT - N/A LEL - N/A UEL - 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, 500 PSIG at 70°F. Do Not Exceed 120°F.

HEALTH HAZARDS

HEALTH HAZARDS - Hydrogen chloride is extremely irritating the airway, eyes, and skin. It is toxic and corrosive. LC_{LO} Human 3000 ppm/5M. LC₅₀ Rat 3124 ppm/30min. LC₅₀ Mouse 1108 ppm/1 h.

SIGNS AND SYMPTOMS OF EXPOSURE -Symptoms of exposure may include burning sensations, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

PRIMARY ROUTES OF ENTRY - Inhalation, Eyes

TARGET ORGANS - Respiratory tract, eyes, skin.

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

EXPOSURE LIMITS - ACGIH 2011: HCl₂ ppm ceiling ; OSHA PEL 3 ppm TWA.

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

EMERGENCY AND FIRST AID PROCEDURES -

Eyes: Immediately wash the eyes with large amounts of water, occasionally lifting the lower and upper lids. Get medical attention immediately.

Skin: Immediately flush the contaminated skin with water. Get medical attention promptly.

Breath: Remove from exposure. If breathing has stopped, give artificial respiration. Get medical attention as soon as possible.

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. Avoid Breathing Gas.

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. 7, January 2012

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.