



ADDITIONAL DATA

<p>TIME WEIGHTED AVERAGE EXPOSURE LIMIT: (Continued) to be changed from 15,000 molar PPM to 30,000 molar PPM (ACGIH, 1984-85).</p>	

Material Safety Data Sheet

<p>LIQUID AIR CORPORATION One California Plaza, Suite 350 2121 N. California Blvd Walnut Creek, California 94598</p>	<p>PRODUCT NAME BlueShield Nos. 6, 7 or 8 TELEPHONE (415) 977-6500 EMERGENCY RESPONSE INFORMATION ON PAGE 3</p>
<p>TRADE NAME AND SYNONYMS BlueShield Nos. 6, 7 or 8 CHEMICAL NAME AND SYNONYMS Proprietary gas mixture FORMULA Proprietary gas mixture</p>	<p>CAS NUMBER N/A CHEMICAL FAMILY Gas mixture</p>
<p>DATE AND REVISIONS OCTOBER 1, 1985 CORPORATE SAFETY DEPT.</p>	

HEALTH HAZARD DATA

<p>TIME WEIGHTED AVERAGE EXPOSURE LIMIT These gas mixtures contain varying quantities of gaseous carbon dioxide. Carbon dioxide has a TWA of 5,000 molar PPM. Its STEL is proposed (Continued on last page.)</p>
<p>SYMPTOMS OF EXPOSURE Concentrations of 20-30 percent of these mixtures when inhaled with adequate oxygen in the air will cause an increase in the respiratory rate. Higher concentrations will cause headache, nausea and eventual unconsciousness.</p>
<p>TOXICOLOGICAL PROPERTIES Carbon dioxide is the most powerful vasodilator known. Inhaling large concentrations causes rapid circulatory insufficiency leading to coma and death. Chronic harmful effects are not known from repeated inhalation of low (20-30%) concentrations of these mixtures.</p>
<p>Listed as Carcinogen <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No or Potential Carcinogen Program <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>I.A.R.C. Monographs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> OSHA Yes <input checked="" type="checkbox"/> No</p>
<p>RECOMMENDED FIRST AID TREATMENT PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE TO BLUESHIELD NOS. 6, 7 OR 8. RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SELF-CONTAINED BREATHING APPARATUS. Inhalation: Conscious persons should be assisted to an uncontaminated area and inhale fresh air. Quick removal from the contaminated area is most important. Unconscious persons should be moved to an uncontaminated area, given mouth-to-mouth resuscitation and supplemental oxygen. Medical assistance should be sought immediately.</p>

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HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	
None	

PHYSICAL DATA	
SOLUBILITY IN WATER	LIQUID DENSITY AT BOILING POINT
Proprietary gas mixture	Proprietary gas mixture
VAPOR PRESSURE	GAS DENSITY AT 70° F 1 atm
Proprietary gas mixture	Proprietary gas mixture
APPEARANCE AND ODOR	FREEZING POINT
Colorless, odorless gas	Proprietary gas mixture

FIRE AND EXPLOSION HAZARD DATA	
FLASH POINT (METHOD USED)	AUTO IGNITION TEMPERATURE
N/A	N/A
EXTINGUISHING MEDIA	FLAMMABLE LIMITS % BY VOLUME
Nonflammable gas mixture	N/A
SPECIAL FIRE FIGHTING PROCEDURES	ELECTRICAL CLASSIFICATION
N/A	Nonhazardous
UNUSUAL FIRE AND EXPLOSION HAZARDS	
N/A	

REACTIVITY DATA	
STABILITY	CONDITIONS TO AVOID
Stable	
REACTIVITY WITH WATER	
X	
HAZARDOUS DECOMPOSITION PRODUCTS	
None	
HAZARDOUS POLYMERIZATION	
None	CONDITIONS TO AVOID
Will Not Occur	

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Evacuate all personnel from affected area. Use appropriate protective equipment. If leak is in container or container valve, contact the closest Liquid Air Corporation location.

WASTE DISPOSAL METHOD

Do not attempt to dispose of waste or unused quantities. Return in the shipping container properly labeled, with any valve outlet plugs or caps secured and valve protection cap in place to Liquid Air Corporation for proper disposal. For emergency disposal, contact the closest Liquid Air Corporation location.

EMERGENCY RESPONSE INFORMATION
 IN CASE OF EMERGENCY INVOLVING THIS MATERIAL, CALL DAY OR NIGHT (800) 231-1366
 OR CALL CHEMTREC AT (800) 424-9300

SPECIAL PROTECTION INFORMATION	
RESPIRATORY PROTECTION (specify type)	Positive pressure air line with mask or self-contained breathing apparatus should be available for emergency use.
VENTILATION	Local exhaust to prevent accumulation above the TWA for carbon dioxide
See Local Exhaust	MECHANICAL (fans)
OTHER	
PROTECTIVE GLOVES	AS required when welding
EYE PROTECTION	Safety goggles or glasses
OTHER PROTECTIVE EQUIPMENT	Safety shoes and appropriate head and eye protection when welding

SPECIAL LABELING INFORMATION

DOT Shipping Name: Compressed gas, n.o.s. DOT Hazard Class: Nonflammable gas.

DOT Shipping Label: Nonflammable gas I.D. No.: UN 1956

SPECIAL HANDLING RECOMMENDATIONS

Use only in well-ventilated areas. Valve protection caps must remain in place unless container is secured with valve outlet piped to use point. Do not drag, slide or roll cylinders. Use a suitable hand truck for cylinder movement. Use a pressure reducing regulator when connecting cylinder to lower pressure (3,000 psig) piping or systems. Do not heat cylinder by any means to increase the discharge rate of product from the cylinder. Use a check valve or trap in the discharge line to prevent hazardous back flow into the cylinder.

SPECIAL STORAGE RECOMMENDATIONS

Protect cylinders from physical damage. Store in cool, dry, well-ventilated area away from heavily trafficked areas and emergency exits. Do not allow the temperature where cylinders are stored to exceed 100° F (54° C). Cylinders should be stored upright and firmly secured to prevent falling or being knocked over. Full and empty cylinders should be segregated. Use a "first in-first out" inventory system to prevent full cylinders being stored for excessive periods of time.

For additional storage recommendations consult LAM Liquid Air, Liquid Air Engineering or Compressed Gas Association Pamphlet P 1

SPECIAL PACKAGING RECOMMENDATIONS

Blueshield Hss. 1, 2, and 8 are non-pressurized and may be used with regular compressed material.

OTHER RECOMMENDATIONS OR PRECAUTIONS

Analytical monitoring for carbon dioxide levels in the work atmosphere is recommended if these mixtures are used in confined areas. Compressed gas cylinders should not be refilled except by qualified producers of compressed gases. Shipment of a compressed gas cylinder which has not been filled by the owner or with his (written) consent is a violation of Federal Law (19CFR).

*Various Government agencies (i.e., Department of Transportation, Occupational Safety and Health Administration, Food and Drug Administration and others) may have specific regulations concerning the transportation, handling, storage or use of this product which may not be contained herein. The customer or user of this product should be familiar with these regulations.