

HELIUM

MSDS Number

BTLSR

National Stock Number

6830-00N044264

Product Name

HELIUM

Manufacturer

AIRGAS

Product Identification

Product ID:HELIUM MSDS Date:05/01/1990 FSC:6830 NIIN:00N044264 MSDS Number: BTLSR

Responsible Party

AIRGAS

FIVE RADNOR CORP CTR 100 MATSONFORD RD

RADNOR, PA 19087

US

Emergency Phone: 215-687-5253

Info Phone: 215-687-5253

Cage: AIRGA

Contractor

FIVE RADNOR CORPORATE CENTER (AIRGAS)

RADNOR, PA 19087

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US

215-687-5253 Cage: FIVER

Ingredients

SECURED IN TRUNKS OF VEHICLES, ENCLOSED VANS, TRUCK

RTECS: 9999999ZZ

SECURED IN OPEN FLATBED OR IN OPEN PICK-UP TYPE

RTECS: 9999999ZZ

HELIUM

CAS: 7440-59-7 RTECS: MH6520000

Fraction By Weight: 100%

OSHA PELN/K

ACGIH TLV: ASPHYXIANT



DISP MUST BE IN ACCORDANCE WITH FEDERAL, STATE

RTECS: 99999992Z OSHA PELN/K

ACGIH TLV: N/K

INCR THE RATE OF PROD FROM CYL. USE A CHECK

RTECS: 9999999ZZ

INTO CYLINDER. PROT CYLINDERS FROM PHYS DMG. STORE IN

RTECS: 9999999ZZ

AREAS & EMER EXITS. DO NOT ALLOW TEMPS WHERE CYLINERS

RTECS: 9999999ZZ

STORED UPRIGHT & FIRMLY SECURED TO PVNT

RTECS: 9999999ZZ

SEGREGATED. USE A "FIRST IN - FIRST OUT" INVENTORY

RTECS: 9999999ZZ

PERIODS OF TIME. HELIUM IS NONCORR & MAY BE USED

RTECS: 9999999ZZ

SHOULD NOT BE REFILLED EXCEPT BY QUALIFIED PRODUCERS

RTECS: 9999999ZZ

CYLINDER WHICH HAS NOT BEEN FILLED BY THE OWNER OR

RTECS: 9999999ZZ

(49CFR).ALWAYS SECURE CYLINDERS IN UPRIGHT POSITION

RTECS: 9999999ZZ

Hazards

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:HELIUM IS NONTOX BUT LIBERATION OF LRG
AMT IN CONFINED AREA COULD DISPLACE AMT OF OXYGEN IN AIR NEC FOR
LIFE. EFTS OF EXP TO HIGH CONC SO AS TO DISPLACE THE OXYGEN IN THE
AIR NEC FOR LIFE ARE HEADACHE, DIZZ, LABORED BRTHG & EVENTUAL
UNCON.BRTHG MIXTURES OF HELIUM W/ ADEQ OXYGEN TO SUPPORT LIFE
MODIFIES(EFTS OF OVEREXP)

Explanation of Carcinogenicity: NOT RELEVANT

Effects of Overexposure: HLTH HAZ: THE VOICE SOUND SO THAT IT IS HIGHER "PITCHED". TLV: HELIUM IS DEFINED AS A SIMPLE ASPHYXIANT. OXYGEN



LEVELS SHOULD BE MAINTAINED AT >18 MOLAR PERCENT AT NORMAL ATMOSPHERIC PRESSURE WHICH IS EQUIVALENT TO A PARTIAL PRESSURE OF 135 MM HG (ACGIH 1989-1990).

Medical Cond Aggravated by Exposure: PERSONS IN ILL HEALTH WHERE SUCH ILLNESS WOULD BE AGGRAVATED BY EXPOSURE TO HELIUM SHOULD NOT BE ALLOWED TO WORK WITH OR HANDLE THIS PRODUCT.

First Aid

First Aid: PROMPT MED ATTN IS MANDATORY IN ALL CASES OF OVEREXPOSURE TO HELIUM. RESCUE PERSONNEL SHOULD BE EQUIPPED W/NIOSH/MSHA APPRVD SCBA. INHAL: CONSCIOUS PERSON SHOULD BE ASSISTED TO AN UNCONTAM AREA & INHA LE FRESH AIR. QUICK REMOVAL FROM THE CONTAM AREA IS MOST IMPORTANT. UNCONSCIOUS PERSONS SHOULD BE MOVED TO AN UNCONTAM AREA, GIVEN MOUTH-TO- MOUTH RESUSCITATION AND SUPPLEMENTAL OXYGEN. (SUPP DATA)

Fire Fighting

Extinguishing Media: NONFLAMMABLE, INERT GAS. EXTINGUISHING MEDIA SUITABLE FOR SURROUNDING FIRE.

Fire Fighting Procedures:IF CYLINDERS ARE INVOLVED IN A FIRE, SAFELY RELOCATE OR KEEP COOL WITH WATER SPRAY. WEAR NIOSH/MSHA APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT.

Accidental Release

Spill Release Procedures: EVACUATE ALL PERSONNEL FROM AFFECTED AREA. USE APPROPRIATE PROTECTIVE EQUIPMENT. IF LEAK IS IN CONTAINER OR CONTAINER VALVE, CONTACT YOUR CLOSEST SUPPLIER LOCATION OR CALL THE EMERGENCY TELEPHONE NUMB ER LISTED HEREIN.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Handling

Handling and Storage Precautions: USE ONLY IN WELL-VENT AREAS. VALVE PROT CAPS MUST REMAIN IN PLACE UNLESS CNTNR IS SECURED W/VALVE OUTLET PIPED TO USE POINT.

Other Precautions: 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 PRESS (SYSTEMS. DO NOT HEAT CYLINDER BY ANY MEANS TO (ING 3)

Exposure Controls

Respiratory Protection:NIOSH/MSHA APPROVED POSITIVE PRESSURE AIR LINE WITH MASK OR SCBA SHOULD BE AVAILABLE FOR EMERGENCY USE.

Ventilation:LOCAL EXHAUST TO PREVENT ACCUM OF HIGH CONCS SO AS TO REDUCE OXYGEN LEVEL IN THE AIR TO LESS THAN 18 MOLAR PERCENT.

Protective Gloves:IMPERVIOUS GLOVES.

Eye Protection:SAFETY GOGGLES OR GLASSES.

Other Protective Equipment:SAFETY SHOES.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

FIRST AID PROC: FURTHER TREATMENT SHOULD BE SYMPTOMATIC AND SUPPORTIVE.

EYE: IMMED FLUSH W/POTABLE WATER FOR A MINIMUM OF 15 MIN. SEEK ASSISTANCE FROM MD . SKIN: FLUSH W/COPIOUS AMTS OF WATER. C ALL MD . INGEST: GET MD IMMED WASTE DISP: SUPPLIER LOCATION OR CALL EMERGENCY TELEPHONE # LISTED. (ING 2)

Chemical Properties

HCC:G3

Boiling Pt:B.P. Text:-452F,-269C Spec Gravity:0.138 (AIR=1) Solubility in Water:NEGLIGIBLE

Appearance and Odor: COLORLESS, ODORLESS GAS.

Stability

Stability Indicator/Materials to Avoid:YES NONE

Hazardous Decomposition Products: NONE.

Disposal



Waste Disposal Methods: DO NOT ATTEMPT TO DISP OF WASTE OR UNUSED QTYS. RETURN IN THE SHIPPING CNTNR PROPERLY LABELED, W/ANY VALVE OUTLET PLUGS OR CAPS SECURED & VALVE PROTECTION CAP IN PLACE TO YOUR SUPPLIER. FOR EMERGENCY DISP ASSISTANCE, CNTCT YOUR CLOSEST (SUPP DATA

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