

HYDROGEN, REFRIGFRATED

MSDS Number

BHDFG

National Stock Number

6830-00-264-6748

Product Name

HYDROGEN, REFRIGFRATED

Manufacturer

AIRCO

Product Identification

Product ID:HYDROGEN, REFRIGFRATED

MSDS Date:07/01/1987

FSC:6830

NIIN:00-264-6748

MSDS Number: BHDFG

Responsible Party

AIRCO

575 MOUNTAIN AVENUE

MURRAY HILL , NJ 07974

US

Emergency Phone: 201-464-8100

Info Phone: 201-464-8100

Cage: AIRCO

Contractor

AIRCO INC, AIRCO INDUSTRIAL GASES DIV.

MURRAY HILL, NJ 07974-2006

US

800-424-9300(CHEMTREC)

Cage: 00741

Ingredients

HYDROGEN

CAS: 1333-74-0

RTECS: MW8900000

Hazards

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:FROSTBITE EFFECTS ARE A CHANGE IN COLOR OF THE SKIN TO GRAY OR WHITE POSSIBLY FOLLOWED BY BLISTERING.

Explanation of Carcinogenicity:HYDROGEN IS INACTIVE BIOLOGICALLY AND ESSENTIALLY NONTXIC

Effects of Overexposure:INHALATION:HIGH CONCENTRATION THAT EXCLUDE ADEQUATE SUPPLY OF OXYGEN FROM THE LUNGS CAUSES DIZZINESS, DEEPER BREATHING DUE TO AIR HUNGER, POSSIBLE NAUSEA & EVENTUAL UNCONSCIOUSNESS. CRYOGENIC LIQUID CAN CAUSE TISSUE FREEZING OR FROSTBITEON DERMAL CONTACT OR IF SPLASHED IN EYES.

First Aid

First Aid:PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES.RESCUE
PERSONL SHOULD BE EQUIPW/S.C.B.A. & BE COGNIZANT OF EXTRM FIRE &
EXPLOSION HAZARD. INHAL: QUICK REMOVALFROM CONTAMINATED AREA IS
MOST IMPORTANT . UNCONSCIOUS PERSON SHOULD BE GIVENMOUTH TO MOUTH
RESUSCITATION. FOR DERMAL CONTACT/FROSTBITE, FLUSH AREA
W/LUKEWRMWATER. DO NOT USE HOT WATER!!! EYE:FLUSH IMMEDIATELY
W/TEPID WTR OR SALINE SOLUT

Fire Fighting

Flash Point:FLAMMABLE GAS
Autoignition Temp:Autoignition Temp Text:***
Lower Limits:4% BY VOL.
Upper Limits:74.5% B/VOL
Extinguishing Media:WATER, CARBON DIOXIDE, DRY CHEMICAL
Fire Fighting Procedures:STOP FLOW OF HYDROGEN IF POSSIBLE. COOL
SURROUNDING CONTAINERS W/WATER SPRAY. HYDROGEN BURNS W/ALMOST
INVISIBLE FLAME RELATIVELY LOW THERMAL RADIATION.
Unusual Fire/Explosion Hazard:SHOULD HYDROGEN FIRE BE EXTINGUISHED &
FLOW OF GAS CONTINUE, INCREASE VENTILATN TO PREVENT EXPLOSION
HAZARD,PARTICULARY IN UPPER PORTIONS OF BUILDINGS/SHEDS.

Accidental Release

Spill Release Procedures:EVACUATE ALL PERSONNEL FROM AFFECTED AREA. USE
APPROPRIATE PROTECTIVE EQUIPMENT. DO NOT ATTEMPT TO REPAIR,
ADJUST, OR MODIFY OPERATION OF VESSELS.NO SMOKING OR OPEN FLAMES
ALLOWED NEAR THESE VESSELS.

Handling

Handling and Storage Precautions:CYLINDERS MUST ALWAYS BE KEPT UPRIGHT.
SPECIALIZEDTRUCKS ARE NEEDED FOR MOVEMENT.FULL/EMPTY CYLINDERSHOULD
BE STORED AWAY FROM FLAMMABLE/OXIDIZING MAT
Other Precautions:IF MALFUNCTIONS OR OTHER TYPE OF OPERATIONAL PROBLEM
OCCURS CONTACT CLOSEST AIRCO/BOC LOCATION IMMEDIATELY.

Exposure Controls

Respiratory Protection:POSITIVE PRESSURE AIR LINE W/FULL FACEPIECE &
ESCAPE AIR SUPPLY OR A SELF CONTAINED BREATHING APPARATUS
SHOULD BE AVAILABLE FOR EMERGENCY USE.
Ventilation:HOOD W/FORCED VENTILATION; LOCAL EXHAUST TO PREVENT
ACCUMULATION ABOVE THE LEL.
Protective Gloves:LOOSE FITTING INSULATED
Eye Protection:SAFETY GOGGLES/GLASSES PLUS FACESHIELD
Other Protective Equipment:SAFETY SHOES, SAFETY SHOWER
Supplemental Safety and Health
NK

Chemical Properties

Boiling Pt:B.P. Text:*SEE BELOW
Vapor Pres:*SEE BELOW
Vapor Density:4.43LB/FT3
Spec Gravity:1 ATM = 0.071
Solubility in Water:VERY SLIGHTLY
Appearance and Odor:COLORLESS, ODORLESS, CLEAR LIQUID

Stability

Stability Indicator/Materials to Avoid:YES
OXIDIZERS
Stability Condition to Avoid:**BOILING POINT: -423F/-252.4C
**VAPOR PRESSURE: -399.8F/ -239.9C
Hazardous Decomposition Products:NONE
Conditions to Avoid Polymerization:PRESENCE OF OXIDIZERS

Disposal

Waste Disposal Methods:DO NOT ATTEMPT TO DISPOSE OF RESIDUAL OR UNUSED
QUANTITIES. RETURN TO AIRCO FOR PROPER DISPOSAL.

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