

<u>HYDROGEN(HIGH PRESSURE GAS)</u>

MSDS Number

BBBXX

National Stock Number

6830-00B210001

Product Name

HYDROGEN(HIGH PRESSURE GAS)

Manufacturer

UNION CARBIDE CORP

Product Identification

Product ID: HYDROGEN(HIGH PRESSURE GAS) MSDS Date: 01/01/1987 FSC:6830 NIIN:00B210001 MSDS Number: BBBXX

Responsible Party

UNION CARBIDE CORPORATION

270 PARK AVENUE

NEW YORK, NY 10017

US

Emergency Phone: 304744-3487

Cage: 05397

Contractor

UNION CARBIDE CORP MATERIALS SYSTEMS DIVISION

CLEVELAND, OH 44101

US

Cage: 05397

Ingredients

HYDROGEN

CAS: 1333-74-0 RTECS: MW8900000

Hazards

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Effects of Overexposure: HYDROGEN ACTS AS AN ASPHYXIANT BY DISPLACING OXYGEN.SYMPTOMS OF ASPHYXIA ARE, HEADACHE, BREATHING AND PLUSE RATES INCREASED, DIFFICULT BREATHING, PERSPIRATION, DIZZINESS, RINGING IN EARS,LIPS BLUE,TREMORS A ND WEAKNESS,FATIGUE UPON EXERTION, DROWSINESS, NAUSEA AND VOMITING, UNCONSCIOUSNESS.

First Aid

First Aid:REMOVE FROM OXYGEN-DEFICIENT ATMOSPHERE.IF NOT BREATHING, ADMINISTER ARTIFICIAL RESPIRATION PERFERRABLY MOUTH-TO-MOUTH.CALL PHYSICIAN.KEEP UNDER MEDICAL OBSERVATION FOR 24 HOURS, IF RENDERED UNCONSCIOUS DUE TO OXYGEN-DEFICIENCY. TREATMENT FORINJURIES FROM BURNS: COVER BURNS W/DRY STERILE DRESSING.PLACE UNDER CARE OF A PHYSICIAN.

Fire Fighting

Flash Point: FLAMMABLE GAS



Lower Limits: 4% Upper Limits: 75%

Extinguishing Media: CO2, DRY CHEMICALS, WATER SPRAY OR FOG.

Fire Fighting Procedures: IMMEDIATELY COOL CONTAINERS WITH WATER SPRAY

FROM MAXIMUM DISTANCE, TAKING CARE NOT TO EXTINGUISH

FLAMES.EXPLOSIVE RE-IGNITION MAY OCCUR IF FLAMES EXTINGUISHED.

Unusual Fire/Explosion Hazard:FLAMMABLE GAS.FLAME IS NEARLY

INVISIBLE.ESCAPING GAS MAY IGNITE SPONTANEOUSLY.FIREBALL IS FORMED

IF GAS CLOUD IS IGNITED IMMEDIATELY AFTER RELEASE.

Accidental Release

Spill Release Procedures:IMMEDIATELY EVACUATE ALL PERSONNEL FROM DANGER AREA.USE SELF-CONTAINED BREATHING APPARATUS WHERE NEEDED.REMOVE ALL SOURCES OF IGNITION IF WITHOUT RISK.REDUCE GAS WITH FOG OR FINE WATER SPRAY.FLAMMABLE GAS MAY SPREAD FROM SPILL.

Handling

Handling and Storage Precautions: PROTECT CYLINDERS FROM DIRECT SUNLIGHT AND STORE IN WELL-VENTILATED AREA. PROTECT CONTAINERS FROM PHYSICAL DAMAGE. ISOLATE FROM CYL. OF OXYGEN & CHLORINE Other Precautions: DO NOT LOAD TOGETHER W/EXPLOSIVES, POISON, RADIOACTIVE MATERIALS AND ORGANIC PEROXIDES. IN EVENT OF FIRE, COOL CYLINDERS WITH WATER SPRAY FROM SAFE DISTANCE.

Exposure Controls

Ventilation: EXPLOSION-PROOF SYSTEM IS ACCEPTABLE. Protective Gloves: PREFERRED FOR CYLINDER HANDLING.

FIGURE CITY OF A COLOR

Eye Protection: SAFETY GLASSES

Other Protective Equipment: METATARSAL SHOES FOR CYLINDER HANDLING.

Supplemental Safety and Health

FORMS EXPLOSIVE MIXTURES WITH AIR AND OXIDIZING AGENTS.CONTAINER MAY RUPTURE DUE TO HEAT OF FIRE.EXPLOSIVE ATMOSPHERES MAY LINGER.BEFORE ENTERING AREA,ESPECIALLY CONFINED AREAS,CHECK ATMOSPHERE WITH A PPROVED EXPLOSION METER.NO PART OF CONTAINER SHOULD BE SUBJECTED TO TEMPERATURES HIGHER THAN 52C(APP.125F)

Chemical Properties

Boiling Pt:B.P. Text:-252.9C

Vapor Pres:GAS

Vapor Density: 0.0695

Spec Gravity: GAS

Solubility in Water: NEGLIGIBLE

Appearance and Odor: COLORLESS, ODORLESS

Percent Volatiles by Volume: 100

Stability

Stability Indicator/Materials to Avoid:YES OXYGEN,OXIDIZING AGENTS Hazardous Decomposition Products:NONE

Disposal

Waste Disposal Methods: PREVENT WASTE FROM CONTAMINATING SURROUNDING ENVIRONMENT. KEEP PERSONNEL AWAY. CALL SUPPLIER FOR DISPOSAL INFORMATION.

Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.