

HYDROGEN

MSDS Number

BHCZQ

National Stock Number

6830-00-169-0792

Product Name

HYDROGEN

Manufacturer

UNION CARBIDE CORP

Product Identification

Product ID:HYDROGEN
MSDS Date:04/01/1986
FSC:6830
NIIN:00-169-0792
MSDS Number: BHCZQ

Responsible Party

UNION CARBIDE CORPORATION
39 OLD RIDGEBURY ROAD
DANBURY , CT 06817-0001
US
Emergency Phone: 1-800-822-4357 CANADA 514-640-6400
Info Phone: ROUTINE INFO CONTACT LOCAL SUPPLIER
Cage: 36346

Contractor

UNION CARBIDE CORP LINDE DIV
DANBURY, CT 06817-0001
US
800-822-4357; 304-744-3487
Cage: 36346

Ingredients

HYDROGEN
CAS: 1333-74-0
RTECS: MW8900000

Hazards

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Health Hazards Acute and Chronic:EYE/SKIN: NO EVIDENCE OF ADVERSE EFFECTS FROM AVAILABLE INFORMATION. INGESTION: UNLIKELY
ROUTE OF EXPOSURE, THIS PRODUCT IS GAS
INHALATION: ASPHYXIAN. MODERATE CONCENT RATIONS MAY CAUSE HEADACHE, DROWINESS, DIZZINESS, EXCITATION, EXCESS SALIVATION, VOMITING, & UNCONSCIOUSNESS.
Effects of Overexposure:HYDROGEN IS AN ASPHYXIAN. LACK OF OXYGEN CAN CAUSE DEATH.
Medical Cond Aggravated by Exposure:PHYSICAL/CHEMICAL PROPERTIES OF MATERIAL SUGGEST THAT OVREXPOSURE IS UNLIKELY TO AGGRAVATE EXISTINGMEDICAL CONDITIONS.

First Aid

First Aid:INGESTION: PRODUCT IS A GAS AT NORMAL TEMPERATURE & PRESSURE.
SKIN: WASH WITH SOAP & WATER. EYE: FLUSH WITH
WATER INHALATION: REMOVE TO FRESH AIR.
GIVE OX YGEN IF BREATHING IS DIFFICULT. GIVEARTIFICIAL RESPIRATION
IF NOT BREATHING. CALL A PHYSICIAN IMMEDIATELY.

Fire Fighting

Flash Point:FLAMMABLE GAS
Autoignition Temp:Autoignition Temp Text:****
Lower Limits:4
Upper Limits:75
Extinguishing Media:CO2, DRY CHEMICALS, WATER SPRAY, OR FOG
Fire Fighting Procedures:EVACUATE ALL PERSONNEL FROM DANGER
AREA.IMMEDIATELY COOL CONTNR W/WTR SPRAY FROMMAX.DISTANCE.TAKING
CARE NOT TO EXTINGUISH FLAMES.REMV IGNT SOURCE W/OUT RISKS.
Unusual Fire/Explosion Hazard:FLAME IS NEARLY INVISIBLE.ESCAPING GAS
MAY IGNITE SPONTANEOUSLY.HYDROGEN HAS A LOW IGNITION
ENERGY.FIREBALL FORMED IF GAS CLOUD IS IGNITED IMMEDIATELY RELEASE.

Accidental Release

Spill Release Procedures:REMOVE ALL SOURCES OF IGNT IF W/O RISK.REDUCE
GAS W/FOG OR FINE WTR SPRAY. SHUTOFF LEAK IF W/O RISK.VENTILATE
AREA OF LEAK/MOVE LEAKING CONTNR TO WELLVENTILATED AREA. USE SCBA
WHERE NEEDED.IMMEDIATELY EVACUATE ALL PERSONNEL FROM DANGER AREA.

Handling

Handling and Storage Precautions:NEVER WORK ON A PRESSURIZED SYSTEM. IF
THERE IS A LEAK,CLOSE THE CYLINDER VALVE,BLOW DOWN THE SYSTM BY
VENTING TO A SAFE PLACE,THEN REPAIR THE LEAK.
Other Precautions:PROTECT CYLINDERS FROM DIRECT SUNLIGHT & STORE IN
WELL VENTILATED AREA. PROTECT CONTAINERS FROM PHYSICIAL DAMAGE. DO
NOT LOAD TOGETHER W/EXPLOSIVES,POISONS, RADIOACTIVE MATERIALS
AND ORGANIC PEROXI DES.

Exposure Controls

Respiratory Protection:SELECT IN ACCORDANCE WITH OSHA 29 CFR 1910.134
Ventilation:LOCAL EXHAUST: EXPLOSION PROOF SYSTEM ACCEPTABLE.
MECHANICAL (GENERAL): INADEQUATE
Protective Gloves:PREFERRED FOR CYLINDER HANDLING
Eye Protection:SELECT IN ACCORDANCE W/OSHA29CFR1910.133
Other Protective Equipment:METATARSAL SHOES FOR CYLINDER HANDLING.
SELECT IN ACCORDANCEW/OSHA 29 CFR 1910.132 AND 1910.133
Supplemental Safety and Health
NK

Chemical Properties

Boiling Pt:B.P. Text:-422.99F
Vapor Pres:GAS
Vapor Density:0.0696
Spec Gravity:GAS
Evaporation Rate & Reference:NA
Solubility in Water:NEGLIGIBLE
Appearance and Odor:COLORLESS GAS AT NORMAL TEMPERATURE AND PRESSURE;
ODORLESS
Percent Volatiles by Volume:100

Stability

Stability Indicator/Materials to Avoid:YES
OXIDIZING AGENTS, LITHIUM, HALOGENS
Stability Condition to Avoid:KEEP AWAY FROM HEAT, SPARKS, AND OPEN
FLAMES. KEEP AWAY FROMOXIDIZING AGENTS.
Hazardous Decomposition Products:NONE

Disposal

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING
AREA.DISCARD ANY PRODUCT,RESIDUE,DISPOSABLE CONTAINER OR LINER IN
COMPLIANCE W/FEDERAL,STATE,& LOCAL REGULATIONS. KEEP PERSONNEL

AWAY.

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