

MATERIAL SAFETY DATA SHEET

For R&D use only. Not for drug, household or other uses.

Click <http://www.lookchem.com/cas-778/7784-42-1.html> for suppliers of this product.

Composition/Information on Ingredient

Cas:
7784-42-1
Code:
M

RTECS:
CG6475000
Code:
M

Name:
ARSINE (SARA III)

Other REC Limits:
N/K

OSHA PEL:
0.05 PPM
Code:
M

OSHA STEL:

Code:

ACGIH TLV:

0.05 PPM

Code:

M

ACGIH STEL:

N/P

Code:

Control Measures

Respiratory Protection:

USE NIOSH/MSHA APPROVED SCBA OR POSITIVE PRESSURE AIR LINE WITH MASK IN OXYGEN-DEFICIENT ATMOSPHERES. RESPIRATORS WILL NOT FUNCTION. 13

Ventilation:

PROVIDE SYS ADEQ TO ENSURE ACETYLENE DOES NOT REACH ITS LEL. LOC EXHST:SUFFICIENT TO KEEP AREA BELOW 2.5% (ING 25)

Protective Gloves:

IMPERVIOUS GLOVES (FP N).

Eye Protection:

CHEMICAL WORKERS GOGGLES (FP N).

Other Protective Equipment:

Equipment SAFETY SHOES WHEN HANDLING CYLINDERS.

Work Hygienic Practices:

NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health:

BOILING PT:-103F, -75C @ 10PSIG. SOL IN H₂O:1.7SCC/100CC H₂O@ 32F. VAP PRESS:649.6 PSIA @ 70F. FIRE FIGHT PROC:AMTS AS HEAVY FOG TO COOL ANY BURNING CYLS & SURROUNDING CNTNRS. KEEP UPWIND. EVAC TO R ADIUS OF 1500 FEET FOR UNCONTROLLABLE FIRES. IF FLAME EXTINGUISHED & ACETYLENE CONTINUES TO ESCAPE, AN EXPLO (ING 6)

Health Hazards Data

LD50/LC50/Mixture:
NONE SPECIFIED BY MANUFACTURER.

Route Of Entry Inds - Inhalation:

YES

Skin:

NO

Ingestion:

NO

Carcinogenicity Inds - NTP:

NO

IARC:

NO

OSHA:

NO

Health Hazards Acute And Chronic:

DIZZINESS, HEADACHE, MILD GASTRIC SYMPTOMS, & (IN HIGH CONCENTRATIONS) UNCONSCIOUSNESS, AND DEATH DUE TO THE REDUCTION OF THE OXYGEN LEVEL IN AIR BELOW THAT REQUIRED TO SUSTAIN LIFE. IN GENERAL INDUSTRIAL PRACTICES, HOWEVER, ACETYLENE DOES NOT CONSTITUTE A SERIOUS HEALTH HAZARD. IT SHOULD BE NOTED THAT(EFTS OF OVEREXP)

Explanation Of Carcinogenicity:

NOT RELEVANT.

Signs And Symptoms Of Overexposure:

HLTH HAZ:BEFORE SUFFOCATION COULD OCCUR, THE LOWER FLAMM LIMIT OF ACETYLENE IN AIR WOULD BE EXCEEDED; POSS CAUSING BOTH AN O₂-DEFICIENT & AN EXPLO ATMOSPHERE. ACETYLENE IS SIMPLE ASPHYXANT & ANESTHETIC. AS NARCOTIC GAS/INTOXICANT, IT CAUSES HYPERCAPNIA (AN EXCESSIVE AMT OF CO IN BLOOD). RPTD EXPOS TO TOLERABLE(ING 16)

Medical Cond Aggravated By Exposure:

NONE SPECIFIED BY MANUFACTURER.

First Aid:

ELIMINATE ALL SOURCES OF IGNITION. INHAL:MOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING DIFFICULT, GIVE O₂. OBTAIN MED ATTN. SKIN:FLUSH W/COPIOUS AMOUNTS OF WATER. CAL L MD (FP N). EYE:FLUSH W/POTABLE WATER FOR MINIMUM OF 15 MINS. CALL MD (FP N). INGEST:CALL MD IMMED (FP N). RESCUE PERS MAY REQ NIOSH/MSHA APPROV SCBA & SHOULD BE COGNIZANT OF EXTREME FIRE/EXPLO HAZ.

Spill Release Procedures:

EVAC IMMED AREA. USE APPROP PROT EQUIP; ELIM ANY POSS SOURCES OF IGNIT, & PROVIDE MAX EXPLO-PROOF VENT. SHUT OFF SOURCE OF ACETYLENE, IF POSS. ISOLATE ANY LEAKING CYL. IF LEAKING FROM CYL, VALVE, OR SAFETY PLUG CNTCT CLOSEST GEN WELDING (ING 17)

Neutralizing Agent:

12 NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods:

DO NOT ATTEMPT TO DISPOSE RESIDUAL OR UNUSED CONTAINERS. RETURN TO YOUR SUPPLIER FOR DISPOSAL. DISPOSAL MUST BE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS (FP N).

Handling And Storage Precautions:

STORE & USE W/ADEQ VENT. DO NOT STORE W/IN 20 FEET OF O₂ OR ANY OTHER OXIDIZER. PROTECT CYLINDERS FROM DAMAGE; DO NOT DRAG, ROLL, SLIDE OR DROP.

Other Precautions:

CYLS SHOULD BE STORED UPRIGHT W/VALVE PROT CAP IN PLACE & FIRMLY SECURED TO PVNT FALLING OR BEING KNOCKED OVER. USE SUITABLE HAND TRUCK FOR CYL MOVEMENT. POST "NO SMOKING OR OPEN FLAMES" SIGNS IN STOR/USE AREAS. THERE SHOULD BE NO (ING 18)

Fire and Explosion Hazard Information

Flash Point Method:

CC

Flash Point:

Flash Point Text:

0F,-18C

Autoignition Temp:

Autoignition Temp Text:

N/A

Lower Limits:

2.5%

Upper Limits:

80%

Extinguishing Media:

CARBON DIOXIDE, DRY CHEMICAL, WATER.

Fire Fighting Procedures:

WEAR NIOSH/MSHA APPROV SCBA & FULL PROT EQUIP (FP N). SHUT OFF SOURCE OF ACETYLENE IF POSS. EXTING ONLY IF FLOW CAN BE SPED. USE WATER IN FLOODING (SUPDAT)

Unusual Fire/Explosion Hazard:

POSS INCR FIRE INTENSITY HAZ IF CYLS ARE SO PILED OR STACKED THAT BURNING GAS ESCAPING FROM MELTED FUSE PLUG (PRESS RELIEF DEVICE) IS DIRECTED (ING 7)

Physical/Chemical Properties

HCC:

NRC/State Lic No:

Net Prop Wt For Ammo:

Boling Point:

B.P. Text:

Melt/Freeze Pt:

N.P/F.P Text:

Decomp Temp:

Decomp Text:

Vapor Pres:

Vapor Density:

N.P. Text:

Volatile Org Content %:

Spec Gravity:

0.906 @32F

VOC Pounds/Gallon:

PH: N/K 14

N.P. Text:

VOC Grams/liter:

Viscosity:

N.P. Text:

Evaporation Rate & Reference:

NOT APPLICABLE (GAS)

Solubility in Water:

SUPP DATA

Appearance and Odor:

COLORLESS GAS WITH ETHEREAL OR GARLIC-LIKE ODOR FROM IMPURITIES

Percent Volatiles by Volume:

N/A

Corrosion Rate:

N/K

Reactivity Data

Stability Indicator:

NO

Stability Condition To Avoid:

DO NOT USE ACETYLENE AT PRESSURES IN EXCESS OF 15 PSIG (30 PSIA). IT IS STABLE BELOW 15 PSI OR IN ACETONE SOLN (ING 11)

Materials To Avoid:

UNDER CERTAIN CNDTNs, ACETYLENE CAN REACT W/COPPER, SILVER, MERCURY TO FORM ACETYLIDES, CMPDS WHICH CAN ACT (ING 12)

Hazardous Decomposition Products:

EVEN IN THE ABSENCE OF AIR OR OXYGEN, BE MADE TO EXPLODE VIOLENTLY (ING 15)

Hazardous Polymerization Indicator:

NO

Conditions To Avoid Polymerization:

NOT RELEVANT.

Toxicological Information

Information:

N/P

MSDS Transport Information

Information:

N/P

Regulatory Information

Sara Title III Information:

N/P

Federal Regulatory Information:

N/P

State Regulatory Information:

N/P

Other Information

Other Information:

N/P

Physical/Chemical Properties

HCC:

NRC/State Lic No:

Net Prop Wt For Ammo:

Boling Point:

B.P. Text:

Melt/Freeze Pt:

N.P/F.P Text:

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