

NGHI SON CHEMIE CO., LTD

ADD: LOT 3, JALAN TPP 5/15, TAMAN PERINDURTRIAN PUCHONG, SELANGOR DARUL EHSAN, MALAYSIA
TEL: 603-80623110 ,FAX:603-80623118 EMAIL: AURORA@PD.NSC.MY

Material safety data sheet

Name: CHLORODIFLUOROMETHANE(R-22)

Cas: 75-45-6

Health Hazards Data

LD50 LC50 Mixture: 2 HR LC50 (RAT) = 200,000 PPM

Route Of Entry Inds - Inhalation: YES

Effects of Exposure: ACUTE: CONTACT WITH VAPOR MAY CAUSE EYE AND SKIN IRRITATION. CONTACT WITH LIQUID MAY CAUSE FROSTBITE. INHALATION OF HIGH CONCENTRATIONS MAY CAUSE ASPHYXIATION; MAY CAUSE SENSITIVITY TO ADRENALIN, PRODUCING HEART EFFECTS. CHRONIC: NONE KNOWN.

Explanation Of Carcinogenicity: MONOCHLORODIFLUOROMETHANE IS NOT LISTED AS CARCINOGEN BY NTP, IARC, OR OSHA.

Signs And Symptions Of Overexposure: SKIN: REDNESS, DISCOMFORT. EYES: REDNESS, PAIN, DISCOMFORT. INHALED: DROWSINESS, UNCONSCIOUSNESS, RESPIRATORY DEPRESSION, RAPID HEARTBEAT, IRREGULAR HEARTBEAT AND DEPRESSION OF CARDIAC FUNCTION. FROST BITE: BURNS, PAIN, REDNESS, POSSIBLE BLISTERS; SKIN MAY TURN WHITE.

Medical Cond Aggravated By Exposure: PERSONS WITH PRE-EXISTING HEART DISEASE MAY BE AT INCREASED RISK FROM EXPOSURE.

First Aid: EYES: FLUSH WITH PLENT OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION. SKIN: GET MEDICAL ATTENTION. IF FROSTBITTEN, WARM SKIN SLOWLY WITH WATER. INHALATION: MOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF BREATHING STOPPED. GIVE OXYGEN IF BREATHING DIFFICULT. GET MEDICAL ATTENTION. INGESTED: NONE SPECIFIED.

Handling and Disposal

Spill Release Procedures: KEEP UPWIND. EVACUATE ENCLOSED SPACES. REMOVE OR EXTINGUISH IGNITION OR COMBUSTION SOURCES (DECOMPOSITION PRODUCTS). STOP LEAK IF POSSIBLE. VENTILATE AREA.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods: RECYCLE OR RECLAIM IF POSSIBLE. RECLAIMED MATERIAL MAY BE INCINERATED BUT TOXIC AND CORROSIVE COMBUSTION PRODUCTS (HF & HCL) MUST BE HANDLED APPROPRIATELY. DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

Handling And Storage Precautions: STORE IN TIGHTLY CLOSED CONTAINERS. KEEP CONTAINERS OUT OF DIRECT SUNLIGHT. KEEP AWAY FROM SOURCES OF HEAT AND OPEN IGNITION SOURCES.

Other Precautions: DO NOT GET IN EYES, ON SKIN OR CLOTHES. DO NOT BREATH VAPOR OR GAS.

Fire and Explosion Hazard Information

Flash Point Text: NONFLAMMABLE

Autoignition Temp Text: 1170F

Extinguishing Media: MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE GEAR DUE TO TOXICITY OF THERMAL DECOMPOSITION PRODUCTS. USE WATER FOG TO KEEP CONTAINERS COOL.

Unusual Fire/Explosion Hazard: MAY DECOMPE DURING HEATING OR FIRE; RELEASING TOXIC AND CORROSIVE GASES. CONTAINER MAY EXPLODE IF HEATED DUE TO PRESSURE RISE.

Control Measures

Respiratory Protection: IF ENGINEERING CONTROLS FAIL, NON-ROUTINE USE OR EMERGENCY OCCURS; USE USE NIOSH/MSHA APPROVED RESPIRATOR OR SUPPLIED AIR RESPIRATOR OR SCBA, AS REQUIRED. USE IN ACCORDANCE WITH 29 CFR 1901.134.

Ventilation: USE ADEQUATE MECHANICAL VENTILATION.

Protective Gloves: RUBBER

Eye Protection: SAFETY GLASSES/CHEMICAL SPLASH GOGGLES

Other Protective Equipment: CLOTHING TO PREVENT CONTACT IF LIQUID.

Work Hygienic Practices: WASH HANDS AFTER USE AND BEFORE EATING, DRINKING, OR SMOKING.

Supplemental Safety and Health:R-22 IS NOT MUTAGENIC IN MAMMALIAM TEST SYSTEMS BUT IS MUTAGENIC TO BACTERIA (AMES TEST). WORKPLACE AIR SHOULD BE MONITORED TO ASSURE THAT TLV ARE NOT EXCEEDED.

Physical/Chemical Properties

HCC: G3

B.P. Text: -410.8C

Vapor Pres: 7033 MM HG

Vapor Density: 3.0(AIR=1)

Spec Gravity: 1.18 (WATER=1)

Solubility in Water: SLIGHT

Appearance and Odor: CLEAR, COLORLESS, LIQUIFIED GAS WITH FAINT ETHER-LIKE ODOR

Percent Volatiles by Volume: 100

Reactivity Data

Stability Indicator: YES

Stability Condition To Avoid: DO NOT EXPOSE PRODUCT TO TEMPERATURES GREATER THAN 800F. CONTACT WITH INCOMPATIBLE MATERIALS.

Materials To Avoid: STRONG ALKALIS, ALKALI EARTH METALS, FINELY DIVIDED METAL POWDERS, AND STRONG OXIDIZING AGENTS.

Hazardous Decomposition Products: THERMAL DECOMPOSITION PRODUCTS INCLUDE HYDROGEN FLUORIDR, HYDROGEN CHLORIDE, CHLORINE, CARBON MONOXIDE, & CARBON DIOXIDE

Hazardous Polymerization Indicator: NO

Conditions To Avoid Polymerization: NONE

Transportation Information

Responsible Party Cage: 0L2W7

Trans ID NO: 47719

Product ID: R22

MFN: 1

Tech Entry NOS Shipping Nm: CHLORODIFLUOROMETANE

Unit Of Issue: CY
Type Of Container: CYLINDER, DISP

Detail DOT Information

DOT PSN Code: DHC
DOT Proper Shipping Name: CHLORODIFLUOROMETHANE, OR REFRIGERANT GAS R22
Hazard Class: 2.2
UN ID Num: UN1018
Label: NONFLAMMABLE GAS

Detail IMO Information

IMO PSN Code: EDB
IMO Proper Shipping Name: CHLORODIFLUOROMETHANE
IMDG Page Number: 2118
UN Number: 1018
UN Hazard Class: 2(2.2)
IMO Packaging Group: -
Subsidiary Risk Label: -
EMS Number: 2-09
MED First Aid Guide NUM: 350

Detail IATA Information

IATA PSN Code: GHQ
IATA UN ID Num: 1018
IATA Proper Shipping Name: CHLORODIFLUOROMETHANE
IATA PSN Modifier: (R22)
IATA UN Class: 2.2
IATA Label: NON-FLAMMABLE GAS

Detail AFI Information

AFI PSN Code: GHQ
AFI Proper Shipping Name: CHLORODIFLUOROMETHANE
AFI Hazard Class: 2.2
AFI UN ID NUM: UN1018

Fire Hazard: None
Reactivity Hazard: None

Hazard And Precautions: CONTACT WITH VAPOR MAY CAUSE EYE/SKIN IRRITATION. CONTACT WITH LIQUID MAY CAUSE FROSTBITE. INHALATION OF HIGH CONCENTRATIONS MAY CAUSE ASPHYXIATION; MAY CAUSE SENSITIVITY TO ADRENALIN, PRODUCING HEART EFFECTS. STORE IN TIGHTLY CLOSED CONTAINERS. KEEP CONTAINERS OUT OF DIRECT SUNLIGHT. KEEP AWAY FROM SOURCES OF HEAT AND OPEN IGNITION SOURCES.

FIRST AID: EYES: FLUSH WITH PLENT OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION. SKIN: GET MEDICAL ATTENTION. IF FROSTBITTEN, WARM SKIN SLOWLY WITH WATER. INHALATION: MOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF BREATHING STOPPED. GIVE OXYGEN IF BREATHING DIFFICULT. GET