

PENNWALT CORPORATION -- ISOTRON 12 -- 6830-00-106-1656

===== Product Identification =====

Product ID:ISOTRON 12

MSDS Date:10/10/1983

FSC:6830

NIIN:00-106-1656

MSDS Number: BHCFJ

=== Responsible Party ===

Company Name:PENNWALT CORPORATION

Address:THREE PARKWAY

City:PHILADELPHIA

State:PA

ZIP:19102

Info Phone Num:215-587-7711

Emergency Phone Num:215-587-7711

Preparer's Name:TOM DOYLE

CAGE:7K913

=== C

Contractor Identification ===

Company Name:PENNWALT CORPORATION/ELF ATOCHEM NORTH AMERICA

Address:THREE PARKWAY

City:PHILADELPHIA

State:PA

ZIP:19102

Phone:215-587-7711

CAGE:7K913

===== Composition/Information on Ingredients =====

Ingred Name:DICHLORODIFLUOROMETHANE (SARA III)

CAS:75-71-8

RTECS #:PA8200000

Fraction by Wt: 100%

Other REC Limits:NONE SPECIFIED BY M.

OSHA PEL:1000 PPM

ACGIH TLV:1000 PPM; 9192

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ozone Depleting Chemical:1

=

=====
===== Hazards Identification =====

LD50 LC50 Mixture:ORAL LD50 (RAT) = >1000MG/KG

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

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

Health Hazards Acute and Chronic:ACUTE: MAY CAUSE EYE & SKIN

IRRITATION. INHALATION MAY CAUSE DIZZINESS, UNCONCIOUSNESS,
DIFFICULTY IN BREATHING OR DEATH. BREATHING HIGH CONCENTRATIONS CAN
CAUSE IRREGULAR AND RAPID HEART BEAT. CHRONI C: PROLONGED OR
REPEATED C

ONTACT WITH GAS ON THE SKIN OR IN EYES CAN CAUSE

IRRITATION. BREATHING MAY CAUSE DEATH.

Effects of Overexposure:HEADACHE, DIZZINESS, DROWSINESS, NAUSEA,

TINGLING OR NUMBNESS OF THE EXTREMITIES, SENSES OF FULLNESS IN THE

HEAD, SENSE OF WARMTH, STUPOR OR DULLNESS, LETHARGY AND DRUNKENESS.

VERY HIGH CONCENTRATIONS MAY LEAD TO UNCONSCIOUSNESS OR EVEN DEATH
IN CONFINED OR POORLY VENTILATED AREAS.

Medical Cond Aggravated by Exposure:PEOPLE WITH KNOWN HISTORY OF HEART
DISEASE O

R IRREGULARITIES OF HEARTBEAT SHOULD BE PARTICULARLY

CAREFUL TO AVOID OVEREXPOSURE TO THESE VAPORS.

=====
===== First Aid Measures =====

First Aid:INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE CPR.

IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN. KEEP

VICTIM QUIET, DO NOT GIVE STIMULANTS. NARCOTIC EFFECT. DENSE VAPORS

MAY REMA IN IN LUNGS. MAY CAUSE MILD IRRITATION. EYE: FLUSH

IMMEDIATELY WITH LARGE AMOUNTS OF WATER FOR 15

MINUTES. GET MEDICAL

ATTENTION. SKIN: WASH WITH SOAP AND WATER PROMPTLY. GET MEDICAL

ATTENTION.

=====
===== Fire Fighting Measures =====

Flash Point:NOT FLAMMABLE

Fire Fighting Procedures:WEAR SCBA IF FIGHTING FIRES NEAR THIS PRODUCT

DUE TO TOXIC THERMAL DECOMPOSITION PRODUCTS. KEEP CONTAINER COOL.

Unusual Fire/Explosion Hazard:MAY DECOMPOSE IN CONTACT WITH FLAMES,

HEATING ELEMENTS, OR IN GAS ENGINES(EXTREME HEAT) RELEASING

IRRITATING, TOXIC AND

CORROSIVE GASES.

===== Accidental Release Measures =====

Spill Release Procedures:KEEP UPWIND, EVACUATE ENCLOSED SPACE. DISPERSE GAS WITH FLOOR-LEVEL FORCED AIR VENTILATION OR WATER SPRAY. DO NOT SMOKE. REMOVE FLAMES, HEATING ELEMENTS, GAS ENGINES, ETC.

Neutralizing Agent:NONE

===== Handling and Storage =====

Handling and Storage Precautions:STORE IN A COOL, DRY, WELL-VENTILATED LOCATION, AWAY FROM ANY AREA WHERE THE FIRE HAZARD MAY BE ACUTE.

KEEP CONTAINERS CLOSED WHEN NOT IN USE.

Other Precautions:EMPTY CONTAINERS MAY CONTAIN HAZARDOUS RESIDUES. DO NOT BREATH DUST, VAPOR, MIST OR GAS. DO NOT GET IN EYES OR ON SKIN.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:SELF-CONTAINED, SUPPLIED AIR.

Ventilation:LOCAL EXHAUST RECOMMENDED TO CONTROL VAPORS BELOW 50% OF TLV.

Protective Gloves:SYNTHETIC RUBBER

Eye Protection:CHEMICAL SAFETY GOGGLES & FACE SHIELD

Other Protective Equipment:APRON AND WORK CLOTHING TO MINIMIZE EXPOSURE. EYE WASH STATION & SAFETY SHOWER RECOMMENDED.

Work Hygienic Practices:WASH THOROUGHLY AFTER USE AND BEFORE EATING, SMOKING OR USING TOILET FACILITIES. DO NOT BREATH VAPORS OR MIST.

Supplemental Safety and Health

===== Physical/Chemical Properties =====

HCC:G3

Boiling Pt:B.P. Text:-22F,-30C

Vapor Pres:84.9

Vapor Density:4.17

Spec Gravity:1.29

Solubility in Water:SLIGHT

Appearance and O

Colorless liquified gas with faint, ethereal odor.
Percent Volatiles by Volume:100

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid: YES

MAGNESIUM

Stability Condition to Avoid: THERMAL DECOMPOSITION.

Hazardous Decomposition Products: HYDROGEN FLUORIDE, HYDROGEN CHLORIDE,
CHLORINE.

===== Disposal Considerations =====

Waste Disposal Methods: BEST TO RECYCLE OR RECLAIM, IF POSSIBLE. MAY BE
INCINERATED IN OIL-FIRED FURNACE BUT TOXIC AND CORROSIVE COMBUSTION
GASES MUST BE HANDLED. CONSULT FEDERAL, STATE, OR LOCAL AUTHORITIES
FOR PROPER DISPOSAL PROCEDURES.

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.