

ICI AMERICAS INC;STUART PHARACEUTICALS,DIV -- ARKLONE P -- 6850-00-319-0834

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

Product ID:ARKLONE P

MSDS Date:10/02/1987

FSC:6850

NIIN:00-319-0834

MSDS Number: BDWSB

=== Responsible Party ===

Company Name:ICI AMERICAS INC;STUART PHARACEUTICALS,DIV

Address:CONCORD PIKE AND MURRY ROAD

Box:2376

City:WILMINGTON

State:DE

ZIP:19897

Country:US

Info Phone Num:302-275-3000

Emergency Phone Num:302-575-3000 800-424-9300(CHEMTREC)

CAGE:1399

2

=== Contractor Identification ===

Company Name:ZENECA INC. ZENECA PHARMACEUTICALS GROUP (FORMERLY ICI  
)

Address:1800 CONCORD PIKE

Box:City:WILMINGTON

State:DE

ZIP:19897

Country:US

Phone:302-886-3000

CAGE:13992

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

Ingred Name:1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113) (SARA  
III)

CAS:76-13-1

RTECS #:KJ4000000

Fraction by Wt: 99.9%

OSHA PEL:1000PPM/1250STEL

ACGIH TLV:1000PPM/1250STEL9192

Ozone Depleting Chemical

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

LD50 LC50 Mixture:ORAL LD50 (RAT) IS 43G/KG

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

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

Health Hazards Acute and Chronic:EYES:MAY CAUSE SLIGHT

IRRITATION.SKIN:MAY CAUSE IRRITATION.INGEST:MAY CAUSE GI TRACT

IRRITATION.INHAL:MISTS MAY CAUSE RESPIRATORY IRRITATION AND CARDIAC  
SENSITIZATION(IRREGULAR HEARTBEAT).

Explanation of Carcinogenicity:THERE A

RE NO INGREDIENTS ABOVE 0.1%

WHICH ARE IDENTIFIED AS CARCINOGENS BY NTP,IARC OR OSHA.

Effects of Overexposure:OVEREXPOSURE PROGRESSES FROM IRRITATION TO  
WEAKNESS,DEPRESSION,"SPINNING

HEAD",DISORIENTATION,UNCOORDINATION,HEADACHE,DROWSINESS,NAUSEA,LOSS  
OF SENSATION,UNCONSCIOUSNESS,POSSIBLE ASPHYXIATION.

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

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

First Aid:SKIN:REMOVE CONTAMINATED CLOTHING;WASH WITH SOAP AND  
WATER.GET MEDICAL ASSISTANCE FOR REDNESS OR BURNING SKIN.EYES:FLUSH  
WITH WATER FOR 15 MINUTES.GET MEDICA ASSISTANCE FOR REDNESS OR  
BURNING.INHAL:RE MOVE TO FRESH AIR.GIVE OXYGEN OR ARTIFICIAL  
RESPIRATION(MOUTH-TO-MOUTH) IF NEEDED.INGEST:DO NOT INDUCE  
VOMITING.GET PROMPT QUALIFIED MEDICAL ATTENTION.IF CONSCIOUS,GIVE  
1-2 GLASSES OF WATER.

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

Flash Point:NONE

Extinguishing Media:USE MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures:USE A SELF-CONTAINED BREATHING APPARATUS AND  
FULL PROTECTIVE EQUIPMENT.

Unusual Fire/Explosion Hazard:VAPORS ARE HEAVY AND MAY CAUSE  
SUFFOCATION.FIRE CONDITIONS MAY EVOLVE TOXIC FUMES.

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

Spill Release Procedures:ELIMINATE SOURCES OF IGNITION.USE PROPER  
RESPIRATORY AND PROTECTIVE EQUIPMENT.VENTILATE AREA.S

OAK UP WITH A  
NON-COMBUSTIBLE INERT ABSORBANT(CLAY,SAND);PLACE IN PROPER  
CONTAINER FOR DISPOSAL.  
Neutralizing Agent:NOT APPLICABLE.

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

Handling and Storage Precautions:STORE IN A COOL,DRY,WELL-VENTILATED  
PLACE.KEEP CONTAINER CLOSED WHEN NOT IN USE.KEEP AWAY FROM  
HEAT,SPARKS,FLAMES AND INCOMPATIBLE MATERIALS.  
Other Precautions:EMPTY CONTAINERS MAY CONTAIN HAZARDOUS  
RESIDUE;DISPOSE OF PROPERLY.VENTILATE LOW LYIN  
G AREAS;VAPORS TEND  
TO ACCUMULATE THERE AND POSE A SUFFOCATION HAZARD.

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

Respiratory Protection:WHERE ENVIRONMENTAL CONTROLS ARE LACKING OR IN  
ENCLOSED SPACES USE EITHER A SELF-CONTAINED BREATHING APPARATUS OR  
A NIOSH/MSHA APPROVED RESPIRATOR FOR ORGANIC VAPORS,DEPENDING ON  
THE AIRBORN CONCENTRA TION.  
Ventilation:LOCAL VENTILATION AT THE WORKSITE(ESP.LOW LYING  
AREAS);MECHANICAL(GENERAL) VENTILATION TO MAINTAI  
N TLV/PEL.  
Protective Gloves:IMPERVIOUS  
Eye Protection:CHEMICAL SPLASH GOGGLES  
Other Protective Equipment:PROTECTIVE CLOTHING,AS NEEDED.PROVIDE A  
LOCAL EYE WASH STATION AND SAFETY SHOWER.  
Work Hygienic Practices:WASH HANDS.SEPERATE WORK CLOTHES FROM STREET  
CLOTHES.LAUNDER WORK CLOTHES BEFORE REUSE.KEEP FOOD OUT OF THE WORK  
AREA.  
Supplemental Safety and Health  
NOTE TO PHYSICIAN: DUE TO CARDIAC SENSITIZATION,DO NOT GIVE ADRENALINE(  
OR SIMILAR SYMPATHOMIMETIC DRUGS).DO NOT GIVE EPIN  
EPHRINE.DO NOT  
ALLOW PATIENT TO EXERCISE VIGOROUSLY WITHIN 24 HOURS OF A POTEN  
TIALY TOXIC EXPOSURE.FREEZE BURNS CAN DEVELOP FROM THE LIQUID FORM  
OF THIS MATERIAL.

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

HCC:T6  
Boiling Pt:B.P. Text:117.7F/48C  
Decomp Temp:Decomp Text:1300F,704C  
Vapor Pres:270  
Vapor Density:6.75@117F  
Spec Gravity:1.6  
Solubility in Water:NEGLIGIBLE  
Appearance and Odor:LIQUID;COLORLESS;FAINT ETHEREAR ODOR  
Percent Volatiles by Volume:100

=

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

Stability Indicator/Materials to Avoid: YES

MAY REACT VIOLENTLY W SODIUM, POTASSIUM, BARIUM. REACTS WITH FINELY DIVIDED AL, ZN, MG (ESP. AT HIGH TEMPERATURES).

Stability Condition to Avoid: HIGH HEAT.

Hazardous Decomposition Products: HALOGEN, HALOGEN ACIDS, TRACE AMOUNT OF CARBONYL HALIDE.

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

Waste Disposal Methods: DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. RCRA CODE IS F002 (SPENT HALOGENATED SOLVENTS).

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.