FISHER SCIENTIFIC, CHEMICAL DIV. -- C298-4 CHLOROFORM -- 6810-01-449-5127

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

Product ID:C298-4 CHLOROFORM
MSDS Date:07/03/1997
FSC:6810
NIIN:01-449-5127
MSDS Number: CFWBC
=== Responsible Party ===
Company Name:FISHER SCIENTIFIC, CHEMICAL DIV.
Address:1 REAGENT LANE
City:FAIR LAWN
State:NJ
ZIP:07410
Country:US
Info Phone Num:201-796-7100
Emergency Phone Num:201-796-
7100/800-424-9300(CHEMTREC)
CAGE:1B464
=== Contractor Identification ===
Company Name:FISHER SCIENTIFIC CO. CHEMICAL MFG DIV
Address:1 REAGENT LANE
Box:City:FAIRLAWN
State:NJ
ZIP:07410-2802
Country:US
Phone:201-796-7100
CAGE:1B464

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

Ingred Name:CHLOROFORM (SARA 302/313) (CERCLA)
CAS:67-66-3
RTECS #:FS9100000
Fraction by Wt: >99%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:C 50 PPM
ACGIH TLV:10 PPM; A2; 9596
EPA Rpt Qty:10 LBS
D

OT Rpt Qty:10 LBS

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

LD50 LC50 Mixture:ORAL,RAT LD50: 908MG/KG.
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO
Health Hazards Acute and Chronic:CONTACT MAY CAUSE SKIN & EYE IRRITATION.INHALATION & INGESTION MAY CAUSE CNS DEPRESSION.MAY CAUSE RESPIRATORY & GI TRACT IRRITATION.INGESTION MAY CAUSE KIDNEY & LIVER DAMAGE.INHALATION MAY CAUSE CARDI AC SENSI
TIZATION &
POSSIBLE FAILURE.CHRONIC:PROLONGED/REPEATED EXPOSURE MAY CAUSE KIDNEY INJURY,CANCER,LIVER DAMAGE.
Explanation of Carcinogenicity:LISTED BY IARC (GROUP 2B CARCINOGEN), NTP (SUSPECT CARCINOGEN), ACGIH (A2-SUSPECT CARCINOGEN), OSHA (POSSIBLE SELECT).
Effects of Overexposure:EYES-SEVERE BURNS, POSSIBLE IRREVERSIBLE EYE DAMAGE. SKIN-BURNING PAIN, ITCHING, REDNESS. INGESTED-NAUSEA, VOMITING, DIARRHEA, CARDIAC DISTURBANCES. INHALED-HEADACHE, DIZZINESS, UNCONSCIOUS
NESS, COMA.
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER. TARGET ORGANS: KIDNEYS, HEART, CENTRAL NERVOUS SYSTEM, LIVER, GASTROINTESTINAL SYSTEM, EXCRETORY SYSTEM.

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

First Aid:IN ALL CASES GET IMMEDIATE MEDICAL ATTENTION. EYES-FLUSH WITH WATER FOR 15 MINUTES, LIFT LIDS. SKIN-REMOVE CONTAMINATED CLOTHES. WASH WITH MILD SOAP & WATER. INHALED-REMOVE TO FRESH AIR. GIVE OXYGEN O R ARTIFICIAL
RESPIRATION AS NEEDED. INGESTED-DO NOT INDUCE VOMITING! IF CONSCIOUS/ALERT, GIVE 2-4 CAPFULS MILK/WATER.

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

Flash Point:NOT AVAILABLE
Extinguishing Media:USE WATER SPRAY, DRY CHEMICAL, FOAM. USE EXTINGUISHING MEDIA MOST APPROPRIATE FOR SURROUNDING FIRE.
Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL FIRE FIGHTER'S PROTECTIVE GEAR.
Unusual Fire/Explosion Hazard:NON-FLAMMABLE.

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

Spill Release Procedures:ABSORB SPILL WITH INERT MATERIAL, THEN PLACE IN A CHEMICAL WASTE CONTAINER. AVOID RUNOFF INTO STORM SEWERS & DITCHES WHICH LEAD TO WATERWAYS.
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:DO NOT STORE IN DIRECT SUNLIGHT. STORE IN A COOL, DRY, WELL-VENTILATED PLACE AWAY FROM INCOMPATIBLE MATERIAL
S. KEEP AWAY FROM ACIDS.
Other Precautions:DO NOT STORE NEAR ALKALINE SUBSTANCES. USE WITH ADEQUATE VENTILATION. DO NOT GET ON SKIN OR IN EYES. AVOID INGESTION & INHALATION.

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

Respiratory Protection:FOLLOW THE OSHA RESPIRATOR REGULATIONS FOUND IN 29 CFR 1910.134. ALWAYS USE A NIOSH-APPOROVED RESPIRATOR WHEN NECESSARY.
Ventilation:USE ADEQUATE MECHANICAL VENTILATION OR LOCAL EXHAUST TO MAINTAIN EXPOSURE BELOW
TLV(S).
Protective Gloves:APPROPRIATE PROTECTIVE GLOVES.
Eye Protection:SAFETY GLASSES/CHEMICAL SPLASH GOGGLES.
Other Protective Equipment:WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT SKIN EXPOSURE. DLA-HMIS: EYE WASH STATION & SAFETY SHOWER AVAILABLE.
Work Hygienic Practices:WASH HANDS AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHES BEFORE REUSE.
Supplemental Safety and Health
INCOMPATIBLES CONTINUED: NITROGEN TETROXIDE, PHOSPHOROUS PENTOXIDE,

POTASSIUM, POTASSIUM HYDROXIDE, METHYL ALCOHOL, POTASSIUM TER-BUTOXIDE, SODIUM METHYLATE, SODIUM-POTASSIUM ALLOY, TRIISOPROPYLPHOSPH INE, CALCIUM HYDROXIDE, FLUORINE.

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

HCC:T3
Boiling Pt:B.P. Text:143F,62C
Melt/Freeze Pt:M.P/F.P Text:-82F,-63C
Decomp Temp:Decomp Text:NOT AVAIL..
Vapor Pres:160
Vapor Density:4.12
Spec Gravity:1.5
Viscosity:5.63 MP @ 68F
Evaporation Rate & Reference:11.6 (N-BUTYL ACETATE=1)
Solub

ility in Water:INSOLUBLE
Appearance and Odor:CLEAR, COLORLESS, VOLATILE LIQUID; SWEET ODOR.

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

Stability Indicator/Materials to Avoid:YES
ACETONE, ALKALIS, STRONG OXIDIZING AGENTS, DISILANE, LITHIUM, MAGNESIUM, NITROGEN TETROXIDE, PERCHLORIC ACID, SODIUM....
Stability Condition to Avoid:HIGH TEMPERATURES, INCOMPATIBLE MATERIALS, LIGHT.
Hazardous Decomposition Products:HYDROGEN CHLORIDE, CARBON DIOXIDE, CHLORINE, PHOSG
ENE GAS.

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL ENVIRONMENTAL REGULATIONS.