

EASTMAN CHEM PRODUCTS A SUB OF EASTMAN KODAK CO -- "EASTMAN" ETHYL ACETATE,
URETHANE GRADE -- 6810-00-062-6954

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

Product ID:"EASTMAN" ETHYL ACETATE, URETHANE GRADE

MSDS Date:01/20/1999

FSC:6810

NIIN:00-062-6954

Status Code:A

MSDS Number: CLCRS

=== Responsible Party ===

Company Name:EASTMAN CHEM PRODUCTS A SUB OF EASTMAN KODAK CO

Address:WILCOX DR AND LINCOLN ST

Bo

x:431

City:KINGSPORT

State:TN

ZIP:37662

Country:US

Info Phone Num:615-229-6094/2000

Emergency Phone Num:800-EASTMAN

Chemtrec Ind/Phone:(800)424-9300

CAGE:74364

=== Contractor Identification ===

Company Name:EASTMAN CHEM PRODUCTS A SUB OF EASTMAN KODAK CO

Address:EASTMAN ROAD

Box:City:KINGSPORT

State:TN

ZIP:37662

Country:US

Phone:423-229-2000

CAGE:74364

Company Name:PHOENIX INDUSTRIES INC

Address:1519 CHAMBERLAYNE PARKWAY

Box:City:RICHMOND

State:VA

ZIP:23222

Country:US

Phone:804-264-5183/FAX: 264

-5535
Contract Num:SP0450-01-M-D997
CAGE:0YED2

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Composition/Information on Ingredients
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Ingred Name:ETHYL ACETATE
CAS:141-78-6
RTECS #:AH5425000
= Wt:100.
OSHA PEL:1400 MG/M3;400 PPM
ACGIH TLV:1440 MG/M3;400 PPM
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

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Hazards Identification
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LD50 LC50 Mixture:ORAL LD50 (RAT): 5.60 G/KG
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:N
O OSHA:NO
Health Hazards Acute and Chronic:INHALATION: HIGH VAPOR CONCENTRATIONS
MAY CAUSE DROWSINESS AND IRRITATION. EYES: HIGH VAPOR
CONCENTRATIONS MAY CAUSE IRRITATION. SKIN: PROLONGED OR REPEATED
CONTACT MAY CAUSE DRYING, CRACKING, OR IRRITATION. INGESTION:
EXPECTED TO BE A LOW INGESTION HAZARD.
Effects of Overexposure:INHALATION: HIGH VAPOR CONCENTRATIONS MAY CAUSE
DROWSINESS AND IRRITATION. EYES: HIGH VAPOR CONCENTRATIONS MAY
CAUSE IRRITATION. SKIN: PROLONGED OR RE
PEATED CONTACT MAY CAUSE
DRYING, CRACKING, OR IRRITATION. INGESTION: EXPECTED TO BE A LOW
INGESTION HAZARD.

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First Aid Measures
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First Aid:INHALATION: MOVE TO FRESH AIR. TREAT SYMPTOMATICALLY. GET
MEDICAL ATTENTION IF SYMPTOMS PERSIST. EYES: IN CASE OF IRRITATION
FROM AIRBORNE EXPOSURE, MOVE TO FRESH AIR. IF EASY TO DO, REMOVE
CONTACT LENSES. GET MEDICAL ATTENTION IF SYMPTOMS PERSIST. SKIN:
WASH WITH SOAP AND WATER. REMO

VE CONTAMINATED CLOTHING AND SHOES.

GET MEDICAL ATTENTION IF SYMPTOMS OCCUR. WASH CONTAMINATED CLOTHING BEFORE REUSE. DESTROY OR THOROUGHLY CLEAN CONTAMINATED SHOES.

INGESTION: SEEK MEDICAL ADVICE.

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

Flash Point Method:TCC

Flash Point:=-4.C, 24.8F

Autoignition Temp:=-485.C, 905.F

Lower Limits:2.02

Upper Limits:10.7

Extinguishing Media:WATER SPRAY, DRY CHEMICAL, CARBON DIOXIDE (CO2), FOAM.

Fire Fighting Procedure

s:WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING. USE WATER SPRAY TO KEEP FIRE-EXPOSED CONTAINERS COOL. WATER MAY BE INEFFECTIVE IN FIGHTING THE FIRE.

Unusual Fire/Explosion Hazard:FLAMMABLE. VAPORS MAY CAUSE A FLASH FIRE OR IGNITE EXPLOSIVELY. VAPORS MAY TRAVEL CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK. PREVENT BUILDUP OF VAPORS OR GASES TO EXPLOSIVE CONCENTRATIONS.

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

Spill

Release Procedures:ELIMINATE ALL IGNITION SOURCES. ABSORB SPILL WITH VERMICULITE OR OTHER INERT MATERIAL THEN PLACE IN A CONTAINER FOR CHEMICAL WASTE. FOR LARGE SPILLS: USE WATER SPRAY TO DISPERSE VAPORS AND DILUTE SPILL TO A NONFLAMMABLE MIXTURE. PREVENT RUNOFF FROM ENTERING DRAINS, SEWERS, OR STREAMS.

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

Handling and Storage Precautions:KEEP AWAY FROM HEAT, SPARKS, AND FLAME. USE ONLY WITH ADEQUATE VENTILATION. KEEP FROM CONTACT WITH

OXIDIZING MATERIALS. COMPLY WITH ALL NATIONAL, STATE, AND LOCAL CODES PERTAINING TO THE STORAGE, HANDLING, DISPENSING, AND DISPOSAL OF FLAMMABLE LIQUIDS. KEEP CONTAINER TIGHTLY CLOSED.

Other Precautions:AVOID BREATHING HIGH VAPOR CONCENTRATIONS. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. USE ONLY WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING.

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

Respiratory Protection

ction:IF ENGINEERING CONTROLS DO NOT MAINTAIN AIRBORNE CONCENTRATIONS BELOW RECOMMENDED EXPOSURE LIMITS, AN APPROVED RESPIRATOR MUST BE WORN. RESPIRATOR TYPE: ORGANIC VAPOR. IF RESPIRATORS ARE USED, A PROGR AM SHOULD BE INSTITUTED TO ASSURE COMPLIANCE WITH OSHA STANDARD 63 FR 1152, JANUARY 8, 1998.

Ventilation:GOOD GENERAL VENTILATION (TYPICALLY 10 AIR CHANGES PER HOUR) SHOULD BE USED. VENTILATION RATES SHOULD BE MATCHED TO CONDITIONS.

Protective Gloves:CHEMICAL-RESISTAN T GLOVES SHOULD BE WORN. CONTACT GLOVE MFR FOR SPECIFIC INFO

Eye Protection:WEAR SAFETY GLASSES WITH SIDE SHIELDS (OR GOGGLES).

Other Protective Equipment:WEAR FULL-FACE RESPIRATOR, IF NEEDED. RECOMMENDED DECONTAMINATION FACILITIES: EYE BATH, WASHING FACILITIES.

Supplemental Safety and Health

USE PROCESS ENCLOSURES, LOCAL EXHAUST VENTILATION, OR OTHER ENGINEERING CONTROLS TO MAINTAIN AIRBORNE LEVELS BELOW RECOMMENDED EXPOSURE LIMITS.

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

HCC:F2

Boiling Pt:=78.C, 172.4F

Melt/Freeze Pt:=-83.C, -117.4F

Vapor Pres:99 MBAR (75 MM HG)

Vapor Density:3.0

Spec Gravity:0.902

pH:NOT AVAILABLE

Viscosity:NOT AVAILABLE

Evaporation Rate & Reference:4.1 (N-BUTYL ACETATE)

Solubility in Water:MODERATE

Appearance and Odor:COLORLESS LIQUID; SWEET, ESTER ODOR.

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

Stability Indicator/Materials to Avoid:YES

MATERIAL CAN REACT VIOLENTLY WITH STRONG OXIDIZING AGENTS, STRONG ACIDS, STRONG BASES.

Hazardous Decomposition Products:CARBON DIOXIDE, CARBON MONOXIDE.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Toxicological Information =====

Toxicological Information:INHALATION LC50 (RAT): 16,000 PPM/6 HOUR(S). DERMAL LD50 (RABBIT): >20 ML/KG (HIGHEST DOSE TESTED). SKIN IRRITATION (RABBIT): VERY SLIGHT. SKIN SENSITIZATION (HUMAN): NONE. EYE IRRITATION (RABBIT) : SLIGHT. SUBCHRONIC TOXICITY

DATA:

INHALATION STUDY (11 WEEKS, GUINEA PIG): NOEL = 1000 PPM (ONLY CONCENTRATION TESTED). INHALATION STUDY (13 WEEKS, RAT): LOEL = 350 PPM; (TARGET ORGAN EFFECTS: NOS E); NOEL = NOT ESTABLISHED. *LOEL = LOWEST-OBSERVED-EFFECT LEVEL, NOAEL = NO OBSERVED-ADVERSE-EFFECT LEVEL, NOEL = NO-OBSERVED-EFFECT LEVEL.

===== Ecological Information =====

Ecological:DATA FOR THIS MATERIAL HAVE BEEN USED TO ESTIMATE ITS ENVIRONMENTAL IMPACT. IT HAS THE FOLLOWING PROPERTIES: A HIGH BIOCHEMICAL OXYGEN DEMAND AND A POTENTIAL TO CAUSE OXYGEN DEPLETION IN AQUEOUS SYSTEMS, A LOW POTENTIAL TO AFFECT AQUATIC ORGANISMS, A LOW POTENTIAL TO PERSIST IN THE ENVIRONMENT, A LOW POTENTIAL TO BIOCONCENTRATE. WHEN DILUTED WITH A LARGE AMOUNT OF WATER, THIS MATERIAL RELEASED DIRECTLY OR INDIRECTLY INTO THE ENVIRONMENT IS NOT EXPECTED TO HAVE A SIGNIFICANT IMPACT. OXYGEN DEMAND DATA: THOD: 1.82 G OXYGEN/G.

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

Waste Disposal Methods:DISCHARGE, TREATMENT, OR DISPOSAL MAY BE SUBJECT TO NATIONAL, STATE, OR LOCAL LAWS. INCINERATE. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUE, FOLLOW LABEL WARNINGS EVEN AFTER CONTAINER IS EMPTIED. RESIDUAL VAPORS MAY EXPLODE ON IGNITION; DO NOT CUT, DRILL, GRIND, OR WELD ON OR NEAR THIS CONTAINER .

===== MSDS Transport Information =====

Transport Information:DOT (USEA) STATUS: REGULATED, CLASS 3, PACKING GROUP II, DOT REPORTABLE QUANTITY: 5000 LB (2270 KG.). AIR - INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO), REGULATED, CLASS 3, PACKING GROUP II. SEA - INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG), REGULATED, CLASS 3.2, PACKING GROUP II.

===== Regulatory Information =====

SARA Title III Information:CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OR TITLE III OF THE SUPERFUND AMENDM

ENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART
372: NONE. SARA (U.S.A.) SECTIONS 311 AND 312 HAZARD
CLASSIFICATION(S): FIRE HAZARD, IMMEDIATE (ACUTE) HEALTH HAZARD.
Federal Regulatory Information:US TOXIC SUBSTANCES CONTROL ACT (TSCA):
THIS PRODUCT IS LISTED ON THE TSCA INVENTORY. ANY IMPURITIES
PRESENT IN THIS PRODUCT ARE EXEMPT FROM LISTING.

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