

EASTMAN KODAK COMPANY -- 158 2352,PT B,KODAK EKTACOLOR RA BLEACH FIXER / RA-4 --  
6750-01-376-5884

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

Product ID:158 2352,PT B,KODAK EKTACOLOR RA BLEACH FIXER / RA-4

MSDS Date:07/22/2000

FSC:6750

NIIN:01-376-5884

Status Code:A

Kit Part:Y

MSDS Number: CKTYH

=== Responsible Party ===

Company Name:EASTMAN KODAK COMPANY

Address:343 STATE STREET

City:ROCHESTER

State:NY

ZI

P:14650

Country:US

Info Phone Num:716-477-3194 MSDS :800- 242-2424

Emergency Phone Num:716-722-5151

Preparer's Name:NOT PROVIDED

CAGE:19139

=== Contractor Identification ===

Company Name:EASTMAN KODAK CO GOVERNMENT MARKETS CONTRACTS

Address:343 STATE ST

Box:City:ROCHESTER

State:NY

ZIP:14650-1115

Country:US

Phone:716-722-5151/(800) 242-2424

CAGE:19139

Company Name:EASTMAN KODAK CO US CUSTOMER SERVICE/GOVERNMENT SALES

Address:800 LEE RD

Box:City:ROCHESTER

State:NY

ZIP:14650-3129

Country:US

Phone:8

00-828-6203  
CAGE:5K871

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Composition/Information on Ingredients  
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Ingred Name:WATER  
CAS:7732-18-5  
RTECS #:ZC0110000  
Minumum % Wt:75.  
Maxumum % Wt:80.  
Other REC Limits:NOT PROVIDED  
Code:F  
Code:F

Ingred Name:AMMONIUM FERRIC ETHYLENEDIAMINETETRAACETIC ACID  
CAS:21265-50-9  
Minumum % Wt:15.  
Maxumum % Wt:20.  
Other REC Limits:NOT PROVIDED  
OSHA PEL:NOT PROVIDED  
ACGIH TLV:NOT PROVIDED

Ingred Name:ACETIC ACID  
CAS:64-19-7  
RTECS #:AF1225000  
Minumum % Wt:1.  
Maxumum % Wt:5.  
Other  
REC Limits:NOT PROVIDED  
OSHA PEL:25 MG/M3;10 PPM  
ACGIH TLV:25 MG/M3;10 PPM  
ACGIH STEL:37 MG/M3;15 PPM  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:DIAMMONIUM ETHYLENEDIAMINETETRAACETIC ACID  
CAS:20824-56-0  
Minumum % Wt:1.  
Maxumum % Wt:5.  
Other REC Limits:NOT PROVIDED  
OSHA PEL:NOT PROVIDED  
ACGIH TLV:NOT PROVIDED

=====  
Hazards Identification  
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LD50 LC50 Mixture:NOT PROVIDED  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute an

d Chronic: EFFECTS OF EXPOSURE: GENERAL:

CONTAINS: AMMONIUM FERRIC ETHYLENEDIAMINETETRAACETIC ACID. THIS COMPOUND CAN CHELATE METALS AND MAY ALTER CALCIUM AND OTHER CATION BALANCES. CONTAINS: DIAMMONIUM ETHYLENE DIAMINETETRAACETIC ACID. THIS COMPOUND CAN CHELATE METALS AND MAY ALTER CALCIUM AND OTHER CATION BALANCES. INHALATION: EXPECTED TO BE A LOW HAZARD FOR RECOMMENDED HANDLING. EYES: NO SPECIFIC HAZARD KNOWN. MAY CAUSE TRANSIENT IRRITATION. SKIN: LOW HAZARD FOR RECOMMENDED HANDLING.

COMMENDED HANDLING.

INGESTION: EXPECTED TO BE A LOW INGESTION HAZARD.

Explanation of Carcinogenicity: CARCINOGENICITY CLASSIFICATION

(COMPONENTS PRESENT AT 0.1% OR MORE): - INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC): NONE - AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH): NONE - NATIONAL TOXICOLOGY PROGRAM (NTP): NONE - OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA): NONE

Effects of Overexposure: EYES: MAY CAUSE TRANSIENT IRRITATION.

Medical

Cond Aggravated by Exposure: NOT PROVIDED

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

First Aid: INHALATION: IF SYMPTOMATIC, MOVE TO FRESH AIR. TREAT SYMPTOMATICALLY. GET MEDICAL ATTENTION IF SYMPTOMS PERSIST. EYES: IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR. SKIN: WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR. WASH CONTAMINATED CLOTHING BEFORE REUSE. DESTROY OR THOROUGHLY CLEAN CONTAMINATED

LY CLEAN CONTAMINATED

SHOES. INGESTION: DRINK 1-2 GLASSES OF WATER. SEEK MEDICAL ATTENTION. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

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

Flash Point: NONE

Extinguishing Media: WATER SPRAY, CARBON DIOXIDE, DRY CHEMICAL, ALCOHOL FOAM.

Fire Fighting Procedures: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING. FIRE OR EXCESSIVE HEAT MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS.

Unusual

Fire/Explosion Hazard:NONE

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

Spill Release Procedures:FLUSH TO SEWER WITH LARGE AMOUNTS OF WATER. OTHERWISE, ABSORB SPILL WITH VERMICULITE OR OTHER INERT MATERIAL, THEN PLACE IN A CONTAINER FOR CHEMICAL WASTE. CLEAN SURFACE THOROUGHLY TO REMOVE RESIDUAL CONTAMINATION.

Neutralizing Agent:NOT PROVIDED

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

Handling and Storage Precautions:KEEP CONTAINER TIGHTLY CLOSED. KEEP CONTAINER TIGHTLY CLOSED. KEEP AWAY FROM INCOMPATIBLE SUBSTANCES (SEE INCOMPATIBILITY SECTION). KEEP FROM CONTACT WITH OXIDIZING MATERIALS.

Other Precautions:AVOID PROLONGED OR REPEATED BREATHING OF MIST OR VAPOR. AVOID CONTACT WITH EYES AND PROLONGED OR REPEATED CONTACT WITH SKIN. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING.

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

Respiratory Protection:NONE SHOULD BE NEEDED. A RESPIRATOR SHOULD BE WORN IF HAZARDOUS DECOMPOSITION PRODUCTS ARE LIKELY TO BE OR HAVE BEEN RELEASED. RESPIRATOR TYPE: FULL-FACE POSITIVE-PRESSURE AIR-SUPPLIED. SEE STABILITY AND REACTIVITY SECTION. IF RESPIRATORS ARE USED, A PROGRAM SHOULD BE INSTITUTED TO ASSURE COMPLIANCE WITH OSHA STANDARD 29 CFR 1910.134.

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

Protectiv

e Gloves:FOR PROLONGED OR REPEATED SKIN CONTACT: WEAR IMPERVIOUS GLOVES.

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

Other Protective Equipment:EYE BATH, WASHING FACILITIES, SAFETY SHOWER.

Work Hygienic Practices:IT IS A GOOD INDUSTRIAL HYGIENE PRACTICE TO MINIMIZE EYE CONTACT. IT IS A GOOD INDUSTRIAL HYGIENE PRACTICE TO MINIMIZE SKIN CONTACT.

Supplemental Safety and Health

SUPPLEMENTARY LOCAL EXHAUST VENTILATION, CLOSED SYSTEMS, OR RESPIRATORY PROTECTION

MAY BE NEEDED IN SPECIAL CIRCUMSTANCES SUCH AS POORLY VENTILATED SPACES, EVAPORATION FROM LARGE SURFACES, SPRAYING, HEATING, ETC.

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

HCC:N1  
NRC/State Lic Num:NOT RELEVANT  
Boiling Pt:>100.C, 212.F  
Melt/Freeze Pt:M.P/F.P Text:NOT PROVIDED  
Decomp Temp:Decomp Text:NOT PROVIDED  
Vapor Pres:24 MBAR(18 MM HG)@ 68F  
Vapor Density:0.6  
Spec Gravity:1.12  
pH:6.2  
Viscosity:NOT PROVIDED  
Evaporation Rate & Reference:NOT PROVIDED  
Solubility in Water:COMPLETE  
Appearance and Odor:BROWN LIQUID WITH SLIGHT AMMONIA ODOR.  
Percent Volatiles by Volume:75-80 WT  
Corrosion Rate:NOT PROVIDED

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

Stability Indicator/Materials to Avoid:YES  
STRONG OXIDIZING AGENTS, BASES, SODIUM HYPOCHLORITE (BLEACH).  
Stability Condition to Avoid:NOT PROVIDED  
Hazardous Decomposition Products:AMMONIA, CHLORAMINE, CARBON DIOXIDE, CARBON MONOXIDE, OXIDES OF NITROGEN.

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

Toxicological Information:EFFECTS OF EXPOSURE: GENERAL: CONTAINS: AMMONIUM FERRIC ETHYLENEDIAMINETETRAACETIC ACID. THIS COMPOUND CAN CHELATE METALS AND MAY ALTER CALCIUM AND OTHER CATION BALANCES. CONTAINS: DIAMMONIUM ETHYLENE DIAMINETETRAACETIC ACID. THIS COMPOUND CAN CHELATE METALS AND MAY ALTER CALCIUM AND OTHER CATION BALANCES. INHALATION: EXPECTED TO BE A LOW HAZARD FOR RECOMMENDED HANDLING. EYES: NO SPECIFIC HAZARD KN O

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IRRITATION. SKIN: LOW HAZARD FOR RECOMMENDED HANDLING. INGESTION:  
EXPECTED TO BE A LOW INGESTION HAZARD.

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

Ecological:THE FOLLOWING PROPERTIES ARE ESTIMATED FROM THE COMPONENTS  
OF THE PREPARATIONS. POTENTIAL TOXICITY: FISH LC50 MG/L: >100.  
DAPHNID EC50 MG/L: 10-100. ALGAL IC50 MG/L: >100. ORGANICS  
READILY DEGRA DABLE (>70%): YES (7 DAYS). POTENTIAL  
BIOACCUMULATION: LOG POW 1

00. A FTER DILUTION WITH A LARGE

AMOUNT OF WATER, FOLLOWED BY SECONDARY WASTE TREATMENT, THIS  
MATERIAL IS NOT EXPECTED TO CAUSE ADVERSE ENVIRONMENTAL EFFECTS.

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

Waste Disposal Methods:DISCHARGE, TREATMENT, OR DISPOSAL MAY BE SUBJECT  
TO NATIONAL, STATE, OR LOCAL LAWS. FLUSH TO SEWER WITH LARGE  
AMOUNTS OF WATER.

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

Transport Information:FOR TRANSPOR

TATION INFORMATION REGARDING THIS

PRODUCT CALL THE KODAK WORLDWIDE TRANSPORTATION HAZMAT HOT LINE:  
(716) 722-2400 BETWEEN 8 A.M. AND 5 P.M. (EASTERN STANDARD TIME),  
MONDAY THROUGH FRIDAY .

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

SARA Title III Information:CHEMICAL(S) SUBJECT TO THE REPORTING  
REQUIREMENTS OF SECTION 313 OR TITLE III OF THE SUPERFUND  
AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR  
PART 372: AMMONIUM THIOS  
ULFATE (AS CHE MICAL SOURCE OF AQUEOUS  
AMMONIA)

Federal Regulatory Information:NOT PROVIDED

State Regulatory Information:MATERIAL(S) KNOWN TO THE STATE OF  
CALIFORNIA TO CAUSE CANCER: NONE - MATERIAL(S) KNOWN TO THE STATE  
OF CALIFORNIA TO CAUSE ADVERSE REPRODUCTIVE EFFECTS: NONE

===== Other Information =====

Disclaimer (provided with this information by the compiling agencies):

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epartment

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.