

EASTMAN KODAK COMPANY -- 813 5048 3000 FIXER AND REPLENISHER, PART A --  
6750-01-363-8343

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

Product ID:813 5048 3000 FIXER AND REPLENISHER, PART A

MSDS Date:02/25/1998

FSC:6750

NIIN:01-363-8343

MSDS Number: CHHVX

=== Responsible Party ===

Company Name:EASTMAN KODAK COMPANY

Address:343 STATE STREET

City:ROCHESTER

State:NY

ZIP:14650

Country:US

Info Phone Num:716-477-

3194 MSDS :800- 242-2424

Emergency Phone Num:716-722-5151

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:800-828-6203

CAGE:5K871

===== Composition/Information on Ingre

dients =====

Ingred Name:WATER  
CAS:7732-18-5  
RTECS #:ZC0110000  
Fraction by Wt: 40-45%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:AMMONIUM THIOSULFATE  
CAS:7783-18-8  
RTECS #:XN6465000  
Fraction by Wt: 40-45%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:SODIUM ACETATE  
CAS:127-09-3  
RTECS #:AJ4300010  
Fraction by Wt: 5-10%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:BORIC ACID  
CAS:10043-35-3  
RTECS #:ED4550000  
Fraction by Wt: 1-5%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:10 MG BORAT  
ES/M3  
ACGIH TLV:5 MG BORATES/M3

Ingred Name:AMMONIUM SULFITE (CERCLA)  
CAS:10196-04-0  
Fraction by Wt: 1-5%  
Other REC Limits:NONE RECOMMENDED  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:ACETIC ACID (CERCLA)  
CAS:64-19-7  
RTECS #:AF1225000  
Fraction by Wt: 1-5%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:10 PPM  
ACGIH TLV:10 PPM/15 STEL; 9596  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:SODIUM BISULFITE (SASA III) (CERCLA)  
CAS:7631-90-5  
RTECS #:VZ2000000  
Fraction by Wt: < 1%  
Other

REC Limits:NONE RECOMMENDED

OSHA PEL:5 MG/M3

ACGIH TLV:5 MG/M3; 9596

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

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

LD50 LC50 Mixture:ORAL LD50 RAT > 2540 MG/KG

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

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

Health Hazards Acute and Chronic:EXPECTED TO BE A LOW INHALATION

HAZARD. MAY LIBERATE SULFUR DIOXIDE GAS WHICH IS IRRITATING TO  
RESPIRATORY TRACT. MAY CAUSE

TRANSIENT EYE IRRITATION. MAY BE

ABSORBED IN TOXIC AMOUNTS THROUGH DAMAGED S KIN. MAY BE HARMFUL IF  
SWALLOWED.

Explanation of Carcinogenicity:THIS COMPOUND CONTAINS NO INGREDIENTS AT  
CONCENTRATIONS OF 0.1% OR GREATER THAT ARE CARCINOGENS OR SUSPECT  
CARCINOGENS.

Effects of Overexposure:RESPIRATORY TRACT IRRITATION, EYE IRRITATION,  
SKIN IRRITATION, DIFFICULT BREATHING, SKIN SENSITIZATION, CHEST  
TIGHTNESS, STOMACH UPSET, HIVES, FAINTNESS, WEAKNESS, DIARRHEA.  
BASED ON RE

PEATED-DOSE ING ESTION STUDIES IN ANIMALS, MAY CAUSE  
ADVERSE REPRODUCTIVE & DEVELOPMENTAL EFFECTS.

Medical Cond Aggravated by Exposure:SOME ASTHMATICS OR  
SULFITE-SENSITIVE INDIVIDUALS MAY EXPERIENCE WHEEZING, CHEST  
TIGHTNESS, STOMACH UPSET, HIVES, FAINTNESS, WEAKNESS & DIARRHEA.

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

First Aid:INHALATION: IF SYMPTOMATIC, MOVE TO FRESH AIR. GET MEDICAL  
ATTENTION IF SYMPTOMS PERSIST. EYES: ANY MATERIAL THAT CONTACTS  
EYES SHOULD BE WASHED OUT IMEEDIATELY WITH WATER. GET MEDICAL  
ATTENTION IF SY MPTOMS OCCUR. SKIN: WASH WITH SOAP AND WATER. GET  
MEDICAL ATTENTION IF SYMPTOMS OCCUR. INGESTION: ONLY INDUCE  
VOMITING AT THE INSTRUCTION OF MEDICAL PERSONNEL. CALL PHYSICIAN OR  
POISON CONTROL ASAP.

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

Flash Point:NONFLAMMABLE

Lower Limits:NOT GIVEN

Upper Limits:NOT GIVEN

Extinguishing Media:USE APPROPRIATE AGENT FOR ADJACENT FIRE.

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

Unusual Fire/Explosion Hazard:NONE SPECIFIED BY MANUFACTURER.

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

Spill Release Procedures:MAY REQUIRE NEUTRALIZATION. FLUSH TO SEWER WITH LARGE AMOUNTS OF WATER.OTHERWISE, ABSORB SILL W/VERMICULITE OR OTHER INERT MATL.THEN PLACE IN CNTNR FOR CHEMICAL WASTE.CLE

AN

SURFACE THOROUGHLY TO REMOV E RESIDUAL CONTAMINATION.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:AVOID BREATHING MIST OR VAPOR. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. USE WITH ADEQUATE VENTILATION. KEEP FROM CONTACT WITH OXIDIZING MATERIALS.

Other Precautions:KEEP CONTAINER TIGHTLY CLOSED. KEEP FROM CONTACT WITH INCOMPATIBLE SUBSTANCES.

===== Exposure C

ontrols/Personal Protection =====

Respiratory Protection:NONE SHOULD BE NEEDED. A FULL-FACE POSITIVE-PRESSURE AIR-SUPPLIED RESPIRATOR MUST BE WORN IF HAZARDOUS DECOMPOSITION PRODUCTS ARE LIKELY TO BE RELEASED OR HAVE BEEN RELEASED.

Ventilation:GOOD GENERAL VENTILATION(TYICALLY 10AIR CHANGES/HR)SHOULD BE USED.VENTILATION RATES SHOULD BE MATCHED TO CONDITIONS.

Protective Gloves:IMPERVIOUS GLOVES FOR RE/PROL CONTACT.

Eye Protection:SAFETY GLASSES W/SIDE SHIELDS.

Other Prot

ective Equipment:CHEMICAL RESISTANT CLOTHING AS NECESSARY TO PREVENT SKIN CONTACT. AN EMERGENCY EYEWASH AND SHOWER SHOULD BE AVAILABLE.

Work Hygienic Practices:WASH HANDS THOROUGHLY WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES.

Supplemental Safety and Health

KEY1: C3.

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

HCC:C1

Boiling Pt:B.P. Text:>212F,>100C

Melt/Freeze Pt:M.P/F.P Text:NOT GIVEN

Decomp Temp:Decomp Text:NOT GIVEN

V

apor Pres:18MM

Vapor Density:0.6

Spec Gravity:1.32

pH:5.0

Evaporation Rate & Reference:NOT GIVEN

Solubility in Water:COMPLETE.

Appearance and Odor:LIQUID, LIGHT YELLOW, SLIGHT SULFUR & ACETIC ACID  
ODOR.

Percent Volatiles by Volume:40-45

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

Stability Indicator/Materials to Avoid:YES

BASES, SODIUM HYPOCHLORITE (BLEACH), STRONG OXIDIZING AGENTS, STRONG  
ACIDS. CONTACT W/BASE LIBERATES FLAMM MATL.

Stability Condition to Av

oid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:AMMONIA, NITROGEN OXIDES (NOX), SULFUR  
DIOXIDE, CHLORAMINE, CARBON MONOXIDE, CARBON DIOXIDE

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

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING  
ENVIRONMENT. DISCARD ANY PRODUCT, RESIDUE, DISPOSAL CONTAINER OR  
LINER IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

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