

EASTMAN KODAK CO GOVERNMENT MARKETS CONTRACTS -- 824 6381, WKG SOL, KODAK X-OMAT RA/30 FIXER AND REPLENISHER -- 6525-01-463-0469

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

Product ID:824 6381, WKG SOL, KODAK X-OMAT RA/30 FIXER AND REPLENISHER

MSDS Date:10/26/2000

FSC:6525

NIIN:01-463-0469

Status Code:A

MSDS Number: CLHGV

==== Responsible Party ====

Company Name:EASTMAN KODAK CO GOVERNMENT MARKETS CONTRACTS

Address:343 STATE ST

City:ROCHESTER

State:NY

ZIP:14650-1115

Country:US

Info Phone Num:716-722-5151/(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

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

Ingred Name:WATER

CAS:7732-18

-5

RTECS #:ZC0110000

Minumum % Wt:85.

Maxumum % Wt:90.

Other REC Limits:NOT PROVIDED

Code:F

Ingred Name:AMMONIUM THIOSULFATE

CAS:7783-18-8

RTECS #:XN6465000

= Wt:10.

Other REC Limits:NOT PROVIDED

ACGIH TLV:NOT PROVIDED

Ingred Name:SODIUM BISULFITE

CAS:7631-90-5

RTECS #:VZ2000000

< Wt:1.

Other REC Limits:NOT PROVIDED

ACGIH TLV:5 MG/M3

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

OT PROVIDED
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:AMMONIUM ACETATE
CAS:631-61-8
RTECS #:AF3675000
< Wt:1.

Other REC Limits:NOT PROVIDED
ACGIH TLV:NOT PROVIDED
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

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

LD50 LC50 Mixture:NOT PROVIDED
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:EFFECTS OF EXPOSURE: INHALATION:
EXPECTED TO BE A LOW HAZARD FOR USUAL INDUSTRIAL OR CO
MMERCIAL

HANDLING BY TRAINED PERSONNEL. IN CONTACT WITH STRONG ACIDS OR IF
HEATED, SULFITES MAY LIBERATE SULFUR D IOXIDE GAS. SULFUR DIOXIDE
GAS IS IRRITATING TO THE RESPIRATORY TRACT. SOME ASTHMATICS OR
HYPERSENSITIVE INDIVIDUALS MAY EXPERIENCE DIFFICULT BREATHING.
EYES: NO SPECIFIC HAZARD KNOWN. MAY CAUSE TRAN SIENT IRRITATION.
SKIN: THIS MATERIAL HAS A LOW POTENTIAL TO CAUSE ALLERGIC SKIN
REACTIONS; HOWEVER, CASES OF HUMAN SKIN SENSITIZATION HAVE BEEN
REPORTED

. INGESTION: MAY BE HARMFUL IF SWALLOWED.

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): NON E - NATIONAL
TOXICOLOGY PROGRAM (NTP): NONE - OCCUPATIONAL SAFETY AND HEALTH
ADMINISTRATION (OSHA): NONE

Effects of Overexposure:INHALATION: IN CONTACT WITH STRONG ACIDS OR IF
HEATED, SULFITES MAY LIBER
ATE SULFUR DIOXIDE GAS. SULFUR DIOXIDE
GAS IS IRRITATING TO THE RESPIRATORY TRACT. EYES: MAY CAUSE
TRANSIENT IRRITATION.

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

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

First Aid:INHALATION: IF SYMPTOMATIC, MOVE TO FRESH AIR. TREAT

SYMPTOMATICALLY. GET MEDICAL ATTENTION IF SYMPTOMS PERSIST. EYES:
ANY MATERIAL THAT CONTACTS THE EYE SHOULD BE WASHED OUT IMMEDIATELY
WITH WATER. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR. SKIN: WASH
WITH SOAP AND WATER. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR.
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

Extinguish

ing Media:USE APPROPRIATE AGENT FOR ADJACENT FIRE.

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

Unusual Fire/Explosion Hazard:SOLUTION CONTAINS A STRONG REDUCING
AGENT. DRIED PRODUCT RESIDUE CAN ACT AS A REDUCING AGENT.

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

Spill Release Procedures:FLUSH TO SEWER WITH LARGE AMOUNT OF WATER.
OTHERWISE, A

BSORB SPILL WITH VERMICULITE OR OTHER INERT MATERIAL,
THEN PLACE IN A CONTAINER FOR CHEMICAL WASTE. CLEAN SURFACE
THOROUGHLY TO REMOVE RESIDUAL C ONTAMINATION.

Neutralizing Agent:NOT PROVIDED

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

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

Other Precautions:AVOID BREATHING MIST OR VA
POR. 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: ACID GAS. SEE STABILITY AND
REACTIVITY SECTION. IF RESPI RATORS ARE USED, A PROGRAM SHOULD BE
INSTITUT

ED 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.

Protective Gloves:IMPERVIOUS GLOVES SHOULD BE WORN.

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.

Suppleme

ntal Safety and Health

ABBREVIATION: N/A = NOT APPLICABLE. N/AV = NOT AVAILABLE. N/K =

UNKNOWN. N/P = NOT PROVIDED. N/R = NOT RELEVANT. N/D = NOT

DETERMINED. N/E = NOT ESTABLISHED. CNS = CENTRAL NERVOUS SYSTEM. GI

= GASTROI NTESTINAL. SCBA = SELF CONTAINED BREATHING APPARATUS.

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

HCC:C3

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 PROVIDE

D

Vapor Pres:68F: 24 MBAR (18 MM HG)

Vapor Density:0.6

Spec Gravity:1.08-1.10

pH:4.9

Viscosity:NOT PROVIDED

Evaporation Rate & Reference:NOT PROVIDED

Solubility in Water:COMPLETE

Appearance and Odor:COLORLESS LIQUID. ODOR: AMMONIA.

Percent Volatiles by Volume:85-90 WT

Corrosion Rate:NOT PROVIDED

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

Stability Indicator/Materials to Avoid:YES

BASES, SODIUM HYPOCHLORITE (BLEACH), STRONG OXIDIZING AGENTS, STRONG ACIDS.

Stabil

ity Condition to Avoid:NOT PROVIDED

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

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

Toxicological Information:EFFECTS OF EXPOSURE: INHALATION: EXPECTED TO
BE A LOW HAZARD FOR USUAL INDUSTRIAL OR COMMERCIAL HANDLING BY
TRAINED PERSONNEL. IN CONTACT WITH STRONG ACIDS OR IF HEATED,
SULFITES MAY LIBERATE SULFUR D IOXIDE GAS. SULFUR DIOXIDE GAS IS
IRRITATING TO THE RES

PIRATORY TRACT. SOME ASTHMATICS OR
HYPERSENSITIVE INDIVIDUALS MAY EXPERIENCE DIFFICULT BREATHING.
EYES: NO SPECIFIC HAZARD KNOWN. MAY CAUSE TRAN SIENT IRRITATION.
SKIN: THIS MATERIAL HAS A LOW POTENTIAL TO CAUSE ALLERGIC SKIN
REACTIONS; HOWEVER, CASES OF HUMAN SKIN SENSITIZATION HAVE BEEN
REPORTED. INGESTION: MAY BE HARMFUL IF SWALLOWED.

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

Ecological:THE FOLLOWING PROPERTIES ARE ESTIMATED FROM THE COMPONENT
S

OF THE PREPARATIONS. POTENTIAL TOXICITY: FISH LC50 MG/L: >100.
DAPHNID EC50 MG/L: >100. ALGAL IC50 MG/L: >100. ORGANICS
READILY DEGRAD ABLE (>70%): YES (7 DAYS). POTENTIAL
BIOACCUMULATION: LOG POW 100.

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

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

===== MSDS Transport Informati
on =====

Transport Information:FOR TRANSPORTATION 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 FR IDAY.

===== 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 A

CT (SARA) OF 1986 AND 40 CFR

PART 372: AMMONIUM THIOSULFATE, AMMONIUM BISULFITE; AS SOURCES 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 WHMIS (CANADA) HAZARD CLASSIFICATION: D2/B

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

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.