

EASTMAN KODAK COMPANY -- 121 1804 VNF-1/RVNP LIQUID FIXER & REPLENISHER,  
CONCENTRATE -- 6750-01-083-4302

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

Product ID:121 1804 VNF-1/RVNP LIQUID FIXER & REPLENISHER, CONCENTRATE

MSDS Date:04/09/1997

FSC:6750

NIIN:01-083-4302

MSDS Number: BWZMD

=== Responsible Party ===

Company Name:EASTMAN KODAK COMPANY

Address:343 STATE STREET

City:ROCHESTER

State:NY

ZIP:14650

Co

untry: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

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Composition/Information on Ingredients =====

Ingred Name:AMMONIUM THIOSULFATE  
CAS:7783-18-8  
RTECS #:XN6465000  
Fraction by Wt: 50-55%  
Other REC Limits:NONE RECOMMENDED

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

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:AMMONIUM BISULFITE (CERCLA)  
CAS:10192-30-0  
RTECS #:  
WT3595000  
Fraction by Wt: 1-5%  
Other REC Limits:NONE RECOMMENDED  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:AMMONIUM ACETATE (CERCLA)  
CAS:631-61-8  
RTECS #:AF3675000  
Fraction by Wt: 1-5%  
Other REC Limits:NONE RECOMMENDED  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.  
Routes of Entry: Inhalation:NO Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:N

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Health Hazards Acute and Chronic:INHAL:EXPECTED TO BE A LOW HAZARD FOR RECOMMENDED HANDLING. EYES:NO SPECIFIC HAZARD KNOWN.MAY CAUSE TRANSIENT IRRITATION. SKIN:LOW HAZARD FOR RECOMMENDED HANDLING. INGEST:EXPECTED TO BE LOW INGESTION HAZARD.

Explanation of Carcinogenicity:PER MSDS:CARCINOGENICITY CLASSIFICATION:IARC/ACGIH/NTP/OSHA:NONE.

Effects of Overexposure:TRANSIENT EYE IRRITATION.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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First Aid Measures =====

First Aid:INHAL:IF SYMPTOMATIC MOVE TO FRESH AIR. GET MED ATTN IF SYMPTONS PERSIST. EYES:ANY MATL THAT CONTACTS EYE SHOULD BE WASHED OUT IMMED W/WATER. GET MED ATTN IF SYMPTOMS OCCUR. SKIN:WASH W/SOAP & WATER. GET MED ATTN IF SYMPTOMS OCCUR. INGEST:DRINK 1-2 GLASSES OF WATER. SEEK MED ATTN. NEVER GIVE ANYTHING BY MOUTH IF UNCONSC.

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

Flash Point:NONE,NON-COMBUST

Auto

ignition Temp:Autoignition Temp Text:NP

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.

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

Spill Release Procedures:FLUSH TO SEWER W/LG AMTS OF WATER.OTHERWISE ABSORB W/VERMICULITE OR OTHER INERT MATERIAL, THEN PLACE IN CONTAINER FOR CHEMICAL WASTE. CLEAN SURFACE THOROUGHLY TO REMOVE RESIDUAL CONTAMINATION.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:USE W/ADEQUATE VENTIALTION.KEE FROM CONTACT W/OXIDIZING MATLS.KEEP CNTNR TIGHTLY CLSD.KEEP AWAY FROM INCOMPATIBLE SUBSTANCES.

Other Precautions:PROPERTIES:MOD BIOCHEM OXY DEMAND,MAY CAUSE OXY DEPLETION IN AQU SYS,LOW POT TO AFFECT A

QU ORGN,LOW POT TO AFFECT

2ND WASTE TREAT MICROBIAL METABOLISM,LOW POT TO AFFECT GERM &/OR  
EARLY GROWTH OF SOME PLANTS,LOW POT TO PERSIST IN ENVIRO(SUP)

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

Respiratory Protection:NONE SHOULD BE NEEDED.

Ventilation:GOOD GENERAL VENTILATION (TYPICALLY 10 AIR CHANGES/HR)

SHOULD BE USED. VENTILATION RATES SHOULD BE MATCHED TO CONDITIONS

Protective Gloves:IMPERVIOUS GLOVES.

Eye Protection:SAFETY GLASSES W/SIDE SHIELDS, GO  
GGLES.

Other Protective Equipment:EYEBATH, WASHING FACILITIES, SAFETY SHOWER.

Work Hygienic Practices:WASH THOROUGHLY AFT HNDLG.GOOD INDUSTRIAL HYG  
PRAC TO MIN SKIN/EYE CONTACT.

Supplemental Safety and Health

OTHER PRECAUT:LOW POT TO BIOCONCEN.AFT DIL W/LG AMT OF WATER & 2ND  
WASTE TREAT,MATL NOT EXPECTED TO CAUSE ADVERSE ENVIRO EFFECTS.

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

HCC:N1

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

Melt/Freeze Pt:M.P/F.P Text:NP

Decomp Temp

:Decomp Text:NP

Vapor Pres:18

Vapor Density:0.6

Spec Gravity:1.08

pH:6.0

Viscosity:NP

Evaporation Rate & Reference:NP

Solubility in Water:COMPLETE

Appearance and Odor:LIQUID, COLORLESS, ODORLESS

Percent Volatiles by Volume:45-50

Corrosion Rate:NP

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

Stability Indicator/Materials to Avoid:YES

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

Stability Condition

to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:NONE(NON-COMBUSTIBLE). HAZ DECOMPO  
PROD:AMMONIA,SULFUR DIOXIDE, NITROGEN OXIDES (NOX),CHLORAMINE.

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

Waste Disposal Methods:DISCHARGE/TREATMENT/DISPOSAL MAY BE SUBJECT TO  
NATIONAL/STATE/LOCAL LAWS. FLUSH TO SEWER W/LG AMTS OF WATER. NO  
SEC 313 TITLE III SARA/40CFR372 CHEMICALS.

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