



MSDS Product Name: KODAK RP X-OMAT Fixer and Replenisher, Working Solution

MATERIAL SAFETY DATA SHEET

000003204/F/USA
Approval Date: 05/06/1998
Print Date: 09/18/2000
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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: KODAK RP X-OMAT Fixer and Replenisher, Working Solution

Catalog Number(s): 180 5076 - To Make 4 gallon (U.S.)
 180 5332 - To Make 10 gallon (U.S.)
 180 5118 - To Make 20 gallon (U.S.)
 180 5134 - To Make 200 gallon (U.S.)
 804 4083 - To Make 200 gallon (U.S.)
 899 9625 - To Make 2400 gallon (U.S.)
 820 6112 - To Make 5500 gallon (U.S.)

Manufacturer/Supplier: EASTMAN KODAK COMPANY, Rochester, New York 14650

For Emergency Health, Safety & Environmental Information, call (716) 722-5151

For other information or to request an MSDS, call (800) 242-2424.

Synonym(s): KAN 965743; Contains: PCD 5538 - Part A, PCD 5597 - Part B;
 D-0026.100

2. COMPOSITION/INFORMATION ON INGREDIENTS

Weight % - Component - (CAS Registry No.)

80-85	Water (007732-18-5)
10-15	Ammonium thiosulfate (007783-18-8)
1-5	Sodium thiosulfate (007772-98-7)
1-5	Acetic acid (000064-19-7)
< 1	Ammonium bisulfite (010192-30-0)
< 1	Sodium bisulfite (007631-90-5)

3. HAZARDS IDENTIFICATION

CONTAINS: Ammonium bisulfite (010192-30-0), sodium bisulfite (007631-90-5)
WARNING!
MAY BE HARMFUL IF SWALLOWED

HMS Hazard Ratings:
Health - 0, Flammability - 0, Reactivity - 0, Personal Protection - B

NFPA Hazard Ratings:

Health - 1, Flammability - 0, Reactivity (Stability) - 0

NOTE: HMIS and NFPA hazard indexes involve data review and interpretation that may vary among companies. They are intended only for rapid, general identification of the magnitude of the potential hazards. The personal protection index is only intended for general guidance on personal protection equipment (PPE) that is suitable for the potential hazards of the material. PPE (e.g., respirators) may not be needed if engineering controls (e.g., local ventilation) are adequate. An asterisk (*), in the HMIS health field, designates potential chronic or target organ hazards. To adequately address safe handling, ALL information in this MSDS must be considered.

4. FIRST-AID MEASURES

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.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Use appropriate agent for adjacent fire.

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing. Fire or excessive heat may produce hazardous decomposition products.

Hazardous Combustion Products: None (noncombustible), (see also Hazardous Decomposition Products section).

Unusual Fire and Explosion Hazards: None

6. ACCIDENTAL RELEASE MEASURES

Flush to sewer with large amounts of water.

7. HANDLING AND STORAGE

Personal Precautionary Measures: Avoid breathing mist or vapor. Avoid contact with eyes and prolonged or repeated contact with skin. Use with adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion: Keep from contact with oxidizing materials. Storage: Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

ACGIH Threshold Limit Value (TLV):

Acetic acid: 10 ppm TWA, 15 ppm STEL

Sodium bisulfite: 5 mg/m³ TWA

OSHA (USA) Permissible Exposure Limit (PEL - 1971 Table Z-1 Values):

Acetic acid: 10 ppm TWA

Ventilation: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions.

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 respirators are used, a program should be instituted to assure compliance with OSHA Standard 29 CFR 1910.134.

Eye Protection: It is a good industrial hygiene practice to minimize eye contact. Wear safety glasses with side shields (or goggles).

Skin Protection: It is a good industrial hygiene practice to minimize skin contact. For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.

Recommended Decontamination Facilities: Eye bath, washing facilities, safety shower

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Liquid

Color: Colorless

Odor: Slight ammonia

Specific Gravity (water = 1): 1.097

Vapor Pressure at 20°C (68°F): 24 mbar (18 mm Hg)

Vapor Density (Air = 1): 0.6

Volatile Fraction by Weight: 81.5 %

Boiling Point: >100°C (>212°F)

Solubility in Water: Complete

pH: 4.0-4.2

Flash Point: None, noncombustible liquid

10. STABILITY AND REACTIVITY

Stability: Stable

Incompatibility: Strong oxidizing agents, strong acids, bases, sodium hypochlorite (bleach). Contact with base liberates flammable material.

Hazardous Decomposition Products: Ammonia, sulfur dioxide, nitrogen oxides (NO_x), chloramine

Hazardous Polymerization: Will not occur.

11. 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 dioxide 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 transient 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. Some asthmatics or sulfite-sensitive individuals may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness and diarrhea.

12. ECOLOGICAL INFORMATION

Introduction: This environmental effects summary is written to assist in addressing emergencies created by an accidental spill which might occur during the shipment of this material, and, in general, it is not meant to address discharges to sanitary sewers or publically owned treatment works.

Summary: Data for the major components of this material have been used to estimate the environmental impact of this material. This material is a moderately acidic aqueous solution, and this property may cause adverse environmental effects. However, this material, itself, has not been tested for environmental effects.

It is expected to have the following properties: a moderate biochemical oxygen demand and may cause oxygen depletion in aqueous systems, a low potential to affect aquatic organisms, a low potential to affect secondary waste treatment microbial metabolism, a low potential to affect the germination and/or early growth of some plants, a low potential to persist in the environment, a low potential to bioconcentrate. After dilution with a large amount of water, followed by secondary waste treatment, this material is not expected to cause adverse environmental effects.

13. DISPOSAL CONSIDERATIONS

Discharge, treatment, or disposal may be subject to national, state, or local laws. Flush to sewer with large amounts of water.

14. 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 Friday.

15. 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
- 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
- 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: None

16. OTHER INFORMATION

US/Canadian Label Statements:

CONTAINS: Ammonium bisulfite (010192-30-0), sodium bisulfite (007631-90-5)
WARNING!
MAY BE HARMFUL IF SWALLOWED

Avoid breathing mist or vapor.
Avoid contact with eyes and prolonged or repeated contact with skin.
Use with adequate ventilation.
Wash thoroughly after handling.

FIRST AID: If swallowed, seek medical advice. Never give anything by mouth to an unconscious person.

Keep out of reach of children.

For additional information, see Material Safety Data Sheet (MSDS) for this material.

IN CASE OF SPILL: Absorb spill with inert material, then place in a chemical waste container. Flush residual spill or area with water. For large spills, dike for later disposal. Prevent runoff from entering drains, sewers, and streams.

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment.

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