

MATERIAL SAFETY DATA SHEET

000014369/F/USA
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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: KODAK PROFESSIONAL Reversal Bath and Replenisher, Process E-6 and Process E-6AR

Catalog Number(s): 113 1580 - 5 gallons (U.S.)
 112 3611 - 10 litres
 118 7889 - 25 gallons (U.S.)
 158 3566 - 100 gallons (U.S.) (E-6AR)

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

For Emergency Health, Safety & Environmental Information, call (585) 722-5151

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

Synonym(s): Concentrate: CIN 10067300; PCD 6333
 Working solution: None

2. COMPOSITION/INFORMATION ON INGREDIENTS

Weight % - Component - (CAS Registry No.)

75-80 Water (007732-18-5)
5-10 Sodium acetate (000127-09-3)
5-10 Substituted phosphonate (002235-43-0)
1-5 Stannous chloride (007772-99-8)
1-5 Acetic acid (000064-19-7)

Working solution:

95-100 Water (007732-18-5)
< 1 Sodium acetate (000127-09-3)
< 1 Substituted phosphonate (002235-43-0)
< 1 Stannous chloride (007772-99-8)
< 1 Acetic acid (000064-19-7)

3. HAZARDS IDENTIFICATION

Concentrate:

CONTAINS: Acetic acid (000064-19-7), stannous chloride (007772-99-8)

WARNING!
CAUSES EYE IRRITATION
PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE IRRITATION

HMIS Hazard Ratings:
Health - 2 , Flammability - 1, Reactivity - 0, Personal Protection - B

NFPA Hazard Ratings:
Health - 1, Flammability - 1, Reactivity (Stability) - 0

Working solution:

LOW HAZARD FOR RECOMMENDED HANDLING

HMIS Hazard Ratings:

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Health - 2, Flammability - 1, Reactivity - 0, Personal Protection - B

NFPA Hazard Ratings:

Health - 1, Flammability - 1, 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:

Concentrate: Immediately flush with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

Working solution: Any material that contacts the eye should be washed out immediately with water. Get medical attention if symptoms occur.

Skin:

Concentrate: Wash with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Working solution: 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:

Concentrate: Water spray, carbon dioxide (CO2), dry chemical, alcohol foam

Working solution: Use appropriate agent for adjacent fire.

Special Fire-Fighting Procedures:

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

Working solution: None (noncombustible)

Hazardous Combustion Products:

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Concentrate: Carbon dioxide, carbon monoxide, oxides of phosphorus

Working solution: None (noncombustible)

Unusual Fire and Explosion Hazards: None

6. ACCIDENTAL RELEASE MEASURES

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.

7. HANDLING AND STORAGE

Personal Precautionary Measures: Avoid breathing mist or vapor at concentrations greater than the exposure limits. Avoid contact with eyes and prolonged or repeated contact with skin. Use with adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion:

Concentrate: Keep from contact with oxidizing materials.

Working solution: No special precautionary measures should be needed under anticipated conditions of use.

Storage: Keep container closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

ACGIH Threshold Limit Value (TLV):

Acetic acid: 10 ppm TWA; 15 ppm STEL
Stannous chloride as Sn: 2 mg/m³ TWA

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

Acetic acid: 10 ppm TWA
Stannous chloride as Sn: 2 mg/m³ TWA

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

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. Respirator type: full-face organic vapor cartridge. If respirators are used, a program should be instituted to assure compliance with OSHA Standard 29 CFR 1910.134.

Eye Protection:

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Concentrate: Wear safety glasses with side shields (or goggles).

Working solution: 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: Clear

Odor:

Concentrate: Acetic acid

Working solution: Odorless

Specific Gravity (water = 1):

Concentrate: 1.14

Working solution: 1.07

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

Vapor Density (Air = 1): 0.6

Volatile Fraction by Weight:

Concentrate: 75-80%

Working solution: 95-100

Boiling Point: >100°C (>212°F)

Solubility in Water: Complete

pH: 5.3

Flash Point:

Concentrate: None

Working solution: None, noncombustible liquid

10. STABILITY AND REACTIVITY

Stability: Stable

Incompatibility:

Concentrate: Strong oxidizing agents

Working solution: None with common materials and contaminants with which the material may reasonably come into contact.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Effects of Exposure:

General:

Contains: stannous chloride. Chronic inhalation of tin dust or fumes can cause benign pneumoconiosis.

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Inhalation: Low hazard for usual industrial handling by trained personnel.

Eyes:

Concentrate: Causes irritation. However, immediate flushing of the eyes with water will minimize any irritative effect.

Working solution: No specific hazard known. May cause transient irritation.

Skin:

Concentrate: Prolonged or repeated skin contact may cause irritation.

Working solution: Low hazard for recommended handling.

Ingestion:

Concentrate: May cause irritation of the gastrointestinal tract. Ingestion can cause abdominal pain, vomiting and diarrhea.

Working solution: Expected to be a low ingestion hazard.

Acute Toxicity Data:

Skin sensitization: low potential
DOT Skin Corrosivity: negative

12. ECOLOGICAL INFORMATION

The following properties are ESTIMATED from the components of the preparations.

	Concentrate	Working Solution
Potential Toxicity		
Fish LC50 mg/l:	>100	>100
Daphnid EC50 mg/l:	>100	>100
Algal IC50 mg/l:	>100	>100
Organics Readily Degradable (>70%):	Yes (7 days)	Yes (7 days)
Potential Bioaccumulation:	Log Pow <1	Log Pow <1
COD (approximate g/l):	106	5
BOD5 (approximate g/l):	83	4
Potential Toxicity Waste treatment microorganisms EC50 (mg/l):		
	>100	>100

13. DISPOSAL CONSIDERATIONS

Concentrate: Discharge, treatment, or disposal may be subject to national,

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state, or local laws. Consult state or local regulatory authorities before flushing to sewer with large amounts of water. Since emptied containers retain product residue, follow label warnings even after container is emptied. Working solution: Discharge, treatment, or disposal may be subject to national, state, or local laws. Consult state or local regulatory authorities before flushing to sewer with large amounts of water.

14. TRANSPORT INFORMATION

For transportation information regarding this product call the Kodak Worldwide Transportation Hazmat Hot Line: (585) 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

Concentrate:

- 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
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16. OTHER INFORMATION

US/Canadian Label Statements:

Concentrate:

CONTAINS: Acetic acid (000064-19-7), stannous chloride (007772-99-8)

WARNING!

CAUSES EYE IRRITATION

PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE IRRITATION

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: In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. In case of skin contact, immediately wash with soap and plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes. Get medical attention if symptoms occur.

Keep out of reach of children.

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

IN CASE OF FIRE: Use water spray, carbon dioxide (CO2), dry chemical, alcohol foam.

Since emptied containers retain product residue, follow label warnings even after container is emptied.

Working solution:

LOW HAZARD FOR RECOMMENDED HANDLING

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

FIRST AID: Treat symptomatically. Get medical attention if symptoms occur.

Keep out of reach of children.

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

Additional hazard precautions for containers greater than 1 gallon of liquid or 5 pounds of solid:

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.

R-1, S-2, F-1, C-0

WS:R-1, S-1, F-0, C-0