

MATERIAL SAFETY DATA SHEET

200001265/F/USA - N-0013.500D

Approval Date: 07/08/1992

Print Date: 07/11/1992

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: KODAK First Developer, Process E-6

Catalog Number(s): 156 4632 - To Make 1 gallon(s) (U.S.)  
156 6538 - Kit(s), To Make 1 pint(s) (U.S.)  
156 6553 - Kit(s), To Make 1 gallon(s) (U.S.)  
181 5034 - Kit(s), To Make 1 gallon(s) (U.S.)  
824 9906 - Kit(s), To Make 1 gallon(s) (U.S.)

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

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

For Other Information, call the Marketing and Distribution Center in Your Area.

Synonym(s): Concentrate: KAN 454873; PCD 5175; N-0013.500  
Working solution: KAN 965672

2. COMPOSITION/INFORMATION ON INGREDIENTS

Weight % - Component - (CAS Registry No.)

Concentrate:

55-60 Water (007732-18-5)  
10-15 Potassium sulfite (010117-38-1)  
5-10 Potassium carbonate (000584-08-7)  
5-10 Potassium hydroquinone monosulfonate (021799-87-1)  
5-10 Diethylene glycol (000111-46-6)  
1-5 Sodium carbonate (000497-19-8)

Working solution:

85-90 Water (007732-18-5)  
1-5 Potassium sulfite (010117-38-1)  
1-5 Potassium carbonate (000584-08-7)  
1-5 Potassium hydroquinone monosulfonate (021799-87-1)  
1-5 Diethylene glycol (000111-46-6)  
< 1 Sodium carbonate (000497-19-8)

3. HAZARDS IDENTIFICATION

WARNING! CONTAINS: Potassium hydroquinone monosulfonate (021799-87-1)  
MAY CAUSE ALLERGIC SKIN REACTION

4. FIRST-AID MEASURES

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Inhalation: If symptomatic, move to fresh air. Get medical attention if symptoms persist.

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

Skin: Immediately remove contaminated clothing and shoes and wash with soap and plenty of water. Get medical attention if symptoms occur. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Ingestion: Drink 1-2 glasses of water. Seek medical attention.

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5. FIRE FIGHTING MEASURES

Extinguishing Media:

Concentrate: Water spray, carbon dioxide (CO<sub>2</sub>), 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.

Working solution: None (noncombustible)

Hazardous Combustion Products:

Concentrate: Carbon dioxide, carbon monoxide, oxides of sulfur

Working solution: None (noncombustible)

Unusual Fire and Explosion Hazards: None

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6. ACCIDENTAL RELEASE MEASURES

Flush to sewer with large amounts of water.

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7. HANDLING AND STORAGE

Personal Precautionary Measures: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Wash thoroughly after handling. The routine use of a nonalkaline (acid) type of hand cleaner and regular cleaning of working surfaces, gloves, etc. will help minimize the possibility of a skin reaction.

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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:

Concentrate: Keep container closed. Keep away from incompatible substances.

Working solution: Keep container closed.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits: Not established

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

Personal Protection: Good industrial hygiene practice should be followed which includes preventing eye contact and minimizing skin contact and inhalation.

Respiratory Protection: None should be needed.

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


Skin Protection: Wear impervious gloves.

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

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9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical Form: Liquid
- Color: Light brown
- Odor: Odorless
- Specific Gravity (water = 1):
  - Concentrate: 1.316
  - Working solution: 1.03-1.09
- Vapor Pressure at 20 C (68 F): 24 mbar (18 mm Hg)
- Vapor Density (Air = 1): 0.6
- Volatile Fraction by Weight:
  - Concentrate: 55-60%
  - Working solution: 85-90%
- Boiling Point: >100 C (>212 F)



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- Solubility in Water: Complete
  - pH:
    - Concentrate: 9.9
    - Working solution: 9.6-9.7
  - Flash Point:
    - Concentrate: None
    - Working solution: None, noncombustible liquid

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10. STABILITY AND REACTIVITY

Stability: Stable

Incompatibility:

Concentrate: Strong oxidizing agents, strong acids

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

Hazardous Polymerization: Will not occur.

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11. TOXICOLOGICAL INFORMATION

Effects of Exposure:

Inhalation: Low hazard for recommended handling.

Eyes: No specific hazard known. May cause transient irritation.

Skin: May cause allergic skin reaction.

Ingestion: Expected to be a low ingestion hazard.

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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. However, this material, itself, has not been tested for environmental effects. This material is a moderately alkaline aqueous solution, and this property may cause adverse environmental effects.

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It is expected to have the following properties: a moderate biochemical oxygen demand and may cause oxygen depletion in aqueous systems, a high potential to affect some aquatic organisms, a low potential to affect secondary waste treatment microbial metabolism, a high potential to affect the germination and/or early growth of some plants, 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.  
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13. DISPOSAL CONSIDERATIONS

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

- For transportation information regarding this product, please phone the Eastman Kodak Distribution Center nearest you: Rochester, NY (716) 588-3536 or 588-3573 or 588-3035; Oak Brook, IL (312) 954-6000; Chamblee, GA (404) 455-0123; Dallas, TX (214) 241-1611; Whittier, CA (213) 945-1255; Honolulu, HI (808) 833-1661.  
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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  
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16. OTHER INFORMATION

US/Canadian Label Statements:

CONTAINS: Potassium hydroquinone monosulfonate (021799-87-1)

WARNING!

MAY CAUSE ALLERGIC SKIN REACTION

Avoid prolonged or repeated contact with skin.

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Wash thoroughly after handling.

FIRST AID: In case of skin contact, wash skin with soap and plenty of water. Get medical attention if symptoms occur. Remove contaminated clothing and shoes. Wash clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Keep out of reach of children

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

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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.