

Microfilm Service Company January 94

MATERIAL SAFETY DATA SHEET

200000357/F/USA - C-0097.000H
Approval Date: 07/01/1992
Print Date: 07/04/1992
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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: KODAK Microfilm Developer and Replenisher

Catalog Number(s): 190 1891 To Make 40 gallon(s) (U.S.)
190 1917 To Make 400 gallon(s) (U.S.)
177 8869 - 4 gallon(s) (U.S.)
190 0901 - 4 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): KAN 365776, PCD 4541, C-0196.500, C-0097.000

2. COMPOSITION/INFORMATION ON INGREDIENTS

Weight % - Component - (CAS Registry No.)
50-55 Water (007732-18-5)
20-25 Potassium sulfite (010117-38-1)
5-10 Diethylene glycol (000111-46-6)
8 Hydroquinone (000123-31-9)
1-5 Potassium hydroxide (001310-58-3)

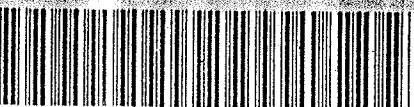
3. HAZARDS IDENTIFICATION

CONTAINS: Hydroquinone (000123-31-9), Potassium hydroxide (001310-58-3)
DANGER!
CAUSES EYE BURNS
HARMFUL IF SWALLOWED
CAUSES SKIN IRRITATION
MAY CAUSE ALLERGIC SKIN REACTION

4. FIRST-AID MEASURES

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 immediately.



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

Ingestion: Induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Water spray; Carbon dioxide (CO₂); Dry chemical; Alcohol foam

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.

Hazardous Combustion Products: Carbon dioxide, carbon monoxide, oxides of sulfur

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 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. Prevention of Fire and Explosion: Keep from contact with oxidizing materials. Storage: Keep container closed. Keep away from incompatible substances.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

ACGIH Threshold Limit Value (TLV):

Hydroquinone: 2 mg/m³ TWA

Potassium hydroxide: 2 mg/m³ TWA, Ceiling

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OSHA (USA) Permissible Exposure Limit (PEL):

Hydroquinone: 2 mg/m³ TWA

Potassium hydroxide: 2 mg/m³ TWA, Ceiling

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.

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

Skin Protection: Wear impervious gloves.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical Form: Liquid
- Color: Light yellow
- Odor: Odorless
- Specific Gravity (water = 1): 1.34
- Vapor Pressure at 20 C (68 F): 24 mbar (18 mm Hg)
- Vapor Density (Air = 1): 0.6
- Volatile Fraction by Weight: 50 %
- Boiling Point: >100 C (>212 F)
- Solubility in Water: Complete
- pH: 11.5
- Flash Point: None

10. STABILITY AND REACTIVITY

Stability: Stable

Incompatibility: Strong oxidizing agents, strong acids

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Effects of Exposure:

Inhalation: Expected to be a low hazard for recommended handling.

Eyes: Causes burns.



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Skin: Causes irritation. May cause allergic skin reaction.

Ingestion: Harmful if swallowed. May cause irritation of the gastrointestinal tract.

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 strongly alkaline 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 high potential to affect some 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. 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

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

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.

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):

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- 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: Hydroquinone

16. OTHER INFORMATION

US/Canadian Label Statements:

CONTAINS: Hydroquinone (000123-31-9), Potassium hydroxide (001310-58-3)

DANGER!

CAUSES EYE BURNS
HARMFUL IF SWALLOWED
CAUSES SKIN IRRITATION
MAY CAUSE ALLERGIC SKIN REACTION

Do not get in eyes and avoid contact with skin and clothing.
Wash thoroughly after handling.

Keep out of reach of children.

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

FIRST AID: If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. In case of skin contact, wash skin with soap and plenty of water. Call a physician or poison control center immediately. Remove contaminated clothing and shoes. Wash clothing before reuse. Destroy or thoroughly clean contaminated shoes.

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

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

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

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,



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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.
