

MATERIAL SAFETY DATA SHEET

EASTMAN KODAK COMPANY
343 State Street
Rochester, New York 14650

For Emergency Health, Safety, and Environmental Information, call 716-722-5151
For other purposes, call the Marketing and Distribution Center in your area

Revised Date of Preparation: 6/21/86 Kodak Accession Number: 354538

SECTION I. IDENTIFICATION

- Product Name: KODAK DEKTOL Developer (Single Powder)
- Formula: Solid Mixture
- Kodak Photographic Chemicals Catalog Number(s): CAT 146 4718 - To Make 1/2 Gallon; CAT 146 4726 - To Make 1 Gallon; CAT 146 4700 - To Make 1 Quart; CAT 146 4734 - To Make 5 Gallons; CAT 807 7927 - Kit
- Mixture Number: 224
- Kodak's Internal Hazard Rating Codes: R: 1 S: 2 F: 0 C: 0

SECTION II. PRODUCT AND COMPONENT HAZARD DATA

| COMPONENT(S): | Weight | ACGIH | Kodak | |
|--------------------------------|---------|------------|---------------|--------------|
| | Percent | TLV(R) | Accession No. | CAS Reg. No. |
| *Sodium carbonate, monohydrate | 50-55 | --- | 900860 | 5968-11-6 |
| Sodium sulfite | 30-35 | --- | 901148 | 7757-83-7 |
| *Hydroquinone** | 6 | 2 mg/m3*** | 900356 | 123-31-9 |
| *p-Methylaminophenol sulfate | 1-5 | --- | 900615 | 55-55-0 |
| Sodium tetraphosphate | 1-5 | --- | 169501 | 14986-84-6 |

*Principal Hazardous Component(s)

**Chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

***See Section VI-A for Additional Information on Exposure Limits

SECTION III. PHYSICAL DATA

- Appearance and Odor: White powder; odorless
- Melting Point: Not Available
- Vapor Pressure: Negligible
- Evaporation Rate (n-butyl acetate = 1): Negligible
- Vapor Density (Air = 1): Not Applicable
- Volatile Fraction by Weight: Negligible
- Specific Gravity (Water = 1): Not Available
- Solubility in Water (by Weight): Appreciable

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SECTION IV. FIRE AND EXPLOSION HAZARD DATA

- Noncombustible
- Extinguishing Media: Use agent appropriate for surrounding fire.
- Special Fire Fighting Procedures:
 - Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
- Unusual Fire and Explosion Hazards:
 - Fire or excessive heat may cause production of hazardous decomposition products.

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SECTION V. REACTIVITY DATA

- Stability: Stable
- Incompatibility: Strong acids
- Hazardous Decomposition Products:
 - As with any other organic material, combustion will produce carbon dioxide and probably carbon monoxide.
 - Sulfur dioxide
- Hazardous Polymerization: Will not occur.

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SECTION VI. TOXICITY AND HEALTH HAZARD DATA

A. EXPOSURE LIMITS:

See Section II
OSHA Permissible Exposure Limit (PEL): 2 mg/m³ (hydroquinone)

B. EXPOSURE EFFECTS:

Inhalation: Low hazard for usual industrial handling.

Eyes: Causes eye irritation.

Skin: Causes skin irritation.
May cause an allergic skin reaction.

Ingestion: May be harmful if swallowed.

C. FIRST AID:

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes and get medical attention.

Skin: Flush skin with plenty of water and wash with a non-alkaline (acid) type of skin cleanser.
If skin irritation or an allergic skin reaction develops, get medical attention.

Ingestion: If swallowed, if conscious, rinse mouth and induce vomiting immediately by giving 1 or 2 glasses of water and touching back of throat with finger or blunt object. Never give anything by mouth to an unconscious person. CALL A PHYSICIAN AT ONCE.

D. TOXICITY DATA:

| Test | Species | Result (1) | Classification (2) |
|-----------------|------------|---------------------|--------------------|
| Acute Oral LD50 | Rat | 0.5 - 5.0 g/kg | Slightly toxic |
| Skin Irritation | Guinea Pig | Moderate irritation | |

SECTION VII. VENTILATION AND PERSONAL PROTECTION

A. VENTILATION: Good general ventilation should be sufficient.

B. SKIN AND EYE PROTECTION:

Protective gloves should be worn.
Safety glasses with side shields are recommended.
The routine use of a non-alkaline (acid) type of skin cleanser and regular cleaning of working surfaces, gloves, etc, will help minimize the possibility of allergic skin reaction.

SECTION VIII. SPECIAL STORAGE AND HANDLING PRECAUTIONS

Keep container tightly closed and away from strong acids.

SECTION IX. SPILL, LEAK, AND DISPOSAL PROCEDURES

Flush to an acid-free sewer with large amounts of water.
Discharge, treatment, or disposal may be subject to federal, state, or local laws.

SECTION X. ENVIRONMENTAL EFFECTS DATA

This chemical formulation has a high biological oxygen demand, and it is expected to cause significant oxygen depletion in aquatic systems. It is expected to have a high potential to affect aquatic organisms, secondary waste treatment microorganisms, and the germination and growth of some plants. The components of this chemical formulation are expected to be biodegradable and are not likely to bioconcentrate. The direct instantaneous discharge to a receiving body of water of an amount of this chemical formulation which will rapidly produce, by dilution, a final concentration of 0.01 mg/L or less is not expected to cause an adverse environmental effect. However, after dilution with a large amount of water, followed by secondary waste treatment, the chemicals in this formulation are not expected to have any adverse environmental impact. 3

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SECTION XI. TRANSPORTATION

For transportation information regarding this product, please phone the Eastman Kodak Distribution Center nearest you: Rochester, NY (716) 588-9232; Oak Brook, IL (312) 954-6000; Chamblee, GA (404) 455-0123; Dallas, TX (214) 241-1611; Whittier, CA (213) 693-5222; Honolulu, HI (808) 833-1661.

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SECTION XII. REFERENCES

1. Unpublished data, Health and Environment Laboratories, Eastman Kodak Company, Rochester, NY.
2. Hodge, H.C. and Sterner, J.H., Am. Indust. Hyg. Assn. Quart. 10, 93 (1949).
3. References are available on request from Health and Environment Laboratories, Eastman Kodak Company, Rochester, NY.

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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 the 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.

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