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.

Date of Preparation: 7/25/84 Approved by U.S. Department of Labor

SECTION I. IDENTIFICATION

000924

- Product Name: KODALITH Fine Line Developer, Part A
- Formula: Solid Mixture
- Kodak Photographic Chemicals Catalog Number(s): CAT 146 5228 - To Make 2 Gallons
- Mixture Number: 210
- Kodak Accession Number: 354532
- Kodak Hazard Rating Codes: R: 2 S: 2 F: 1 C: 0

SECTION II. PRODUCT AND COMPONENT HAZARD DATA

A. COMPONENT(S):	Weight Percent	TLV(R)	Kodak Accession No.	CAS Reg. No.
* Sodium formaldehyde bisulfite	75-80	---	906450	870-72-4
* Hydroquinone	20-25	2 mg/m3	900356	123-31-9

*Principal Hazardous Component(s)

B. PRECAUTIONARY LABEL STATEMENT(S):

CAUTION! May cause skin and eye irritation and allergic skin reaction.
Avoid contact with skin and eyes.
Avoid breathing dust.

SECTION III. PHYSICAL DATA

- Appearance and Odor: Slightly yellow powder; odorless
- Melting Point: Not available for solid mixtures
- Boiling Point: Not available for solid mixtures
- Vapor Pressure: Negligible
- Evaporation Rate (n-butyl acetate = 1): Negligible
- Vapor Density (Air = 1): Not Applicable
- Volatile Fraction by Weight: Negligible
- Specific Gravity (H2O = 1): GT 1
- Solubility in Water (by Weight): Appreciable

SECTION IV. FIRE AND EXPLOSION HAZARD DATA

- Extinguishing Media: Water spray; Dry chemical; CO2
- 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.

SECTION V. REACTIVITY DATA

- Stability: Stable
- Incompatibility: Mineral acids
- Hazardous Decomposition Products:
  As with any other organic material, combustion will produce carbon dioxide and probably carbon monoxide.
  Oxides of sulfur may also be present.
- Hazardous Polymerization: Will not occur.

SECTION VI. TOXICITY AND HEALTH HAZARD DATA

A. EXPOSURE LIMITS: See Section II

B. EXPOSURE EFFECTS:

Inhalation: Dust may cause upper respiratory tract irritation.

Eyes: Contact with the powder may cause eye irritation.

Skin: Prolonged or repeated skin contact may cause skin irritation.
May result in an allergic skin reaction.

C. FIRST AID:

Inhalation: Remove from exposure, treat symptomatically, and get medical attention.

Eyes: Immediately flush eyes with plenty of water 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.

SECTION VII. PERSONAL PROTECTION AND CONTROLS

A. RESPIRATORY PROTECTION:

An appropriate NIOSH-approved respirator for dust should be worn if needed.

B. VENTILATION:

Local Exhaust: If needed to control dust.
Mechanical (General): Recommend at least ten air changes per hour for good general room ventilation.

C. SKIN AND EYE PROTECTION:

Protective gloves should be worn.
Safety glasses should be worn.
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

Store away from mineral 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

A. SUMMARY:

This chemical formulation has not been tested for environmental effects. Some laboratory test data and published data are available for the major components of this chemical formulation, and these data have been used to provide the following estimate of environmental impact:1,2,3,4,5

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. It is expected to have a moderate potential to affect secondary waste treatment microorganisms and the germination and growth of some plants. The components of this chemical formulation are 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 0.025 mg/L or less is not expected to cause an adverse environmental effect. 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.

SECTION XI. TRANSPORTATION

Transportation information may be obtained by requesting an EXTERNAL TRANSPORTATION ADDENDUM sheet by catalog number(s) from Kodak Publications Data Services, Eastman Kodak Company, 343 State Street, Rochester, New York 14650.

SECTION XII. REFERENCES

1. Toxicity results are from unpublished data, Health and Environment Laboratories, Eastman Kodak Company, Rochester, New York.

2. Verschueren, K., Handbook of Environmental Data on Organic Chemicals, Van Nostrand Reinhold Company, New York, N.Y., 1977.

3. Battelle's Columbus Laboratories, Water Quality Critical Data Book - Vol. 3 - Effects of Chemicals on Aquatic Life - Selected Data from the Literature Through 1968, for the U.S. Environmental Protection Agency, Project No. 18050 GWV, Contract No. 68-01-0007, May 1971.

4. National Association of Photographic Manufacturers, Inc. and Hydroscience, Inc., Environmental Effects of Photoprocessing Chemicals, National Association of Photographic Manufacturers, Harrison, New York, 1974, 2 Vols.

5. Kodak Publication J-41, "BOD5 and COD of Photographic Chemicals", Eastman Kodak Co., 1981.

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