



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 all other purposes, call the Marketing and Distribution Center in your area.

Date of Preparation: 3/6/85

Approved by U.S. Department of Labor

SECTION I. IDENTIFICATION

- Product Name: KODAK KC-110 Developer
- Formula: Aqueous Mixture
- Kodak Photographic Chemicals Catalog Number(s): CAT 140 8962 - To Make 3 1/2 Gallons; CAT 140 8968 - To Make 2 Gallons
- Solution Number: 4387
- Kodak Accession Number: 427909

SECTION II. PRODUCT AND COMPONENT HAZARD DATA

PRINCIPAL COMPONENT(S)	Weight Percent	TLV	Kodak Accession No.	CAS Reg. No.
Water	20-30	---	035290	7732-18-5
Diethanolamine-sulfur dioxide complex	40-45	---	931981	63148-47-3
*2-Aminoethanol	5-10	3 ppm	901597	141-43-5
Diethylene glycol	5-10	---	902041	111-46-6
*Hydroquinone	5-10	2 mg/m ³	900356	123-31-9

*Principal Hazardous Component(s)

B. PRECAUTIONARY LABEL STATEMENT(S):

Commercial Label

CONTAINS: 2-aminoethanol and hydroquinone
WARNING:
CAUSES SKIN AND EYE IRRITATION
CAN CAUSE ALLERGIC SKIN REACTION
Avoid contact with eyes, skin, and clothing.
Wash thoroughly after handling.
First Aid: In case of eye contact, immediately flush with plenty of water for at least 15 minutes. Get medical attention.
Immediately wash with soap and plenty of water.

Household Label

CONTAINS: 2-aminoethanol and hydroquinone
WARNING:
CAUSES SKIN AND EYE IRRITATION
CAN CAUSE ALLERGIC SKIN REACTION
Avoid contact with eyes, skin, and clothing.
Wash thoroughly after handling.
First Aid: In case of eye contact, immediately flush with plenty of water for at least 15 minutes. Get medical attention.
Immediately wash with soap and plenty of water. KEEP OUT OF REACH OF CHILDREN.

SECTION III. PHYSICAL DATA

- Appearance and Odor: Brown solution; amine odor
- Boiling Point: > 100 °C (> 212 °F) @ 760 mmHg
- Vapor Pressure: ~ 11 mmHg @ 20 °C
- Evaporation Rate (n-butyl acetate = 1): Not Available
- Vapor Density (Air = 1): ~ 2.1
- Volatile Fraction by Weight: ~ 70 %
- Specific Gravity (H₂O = 1): 1.240
- pH: ~ 9.0
- Solubility in Water: Complete

SECTION IV. FIRE AND EXPLOSION HAZARD DATA

- Flash Point: None
- 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
Strong oxidizers
- Hazardous Decomposition Products: As with any other organic material, combustion will produce carbon dioxide and probably carbon monoxide.
Oxides of sulfur and nitrogen may also be present.
Ammonia
- Hazardous Polymerization: Will not occur.

SECTION VI. TOXICITY AND HEALTH HAZARD DATA

A. THRESHOLD LIMIT VALUE: See Section II

B. EXPOSURE EFFECTS:

Inhalation: Vapor may cause upper respiratory tract irritation.
Eyes: May cause irritation.
Vapor may cause eye irritation.
Skin: Prolonged or repeated skin contact may cause skin irritation.
Prolonged or repeated skin contact may result in an allergic skin reaction.

C. FIRST AID:

Inhalation: Remove to fresh air.
Eyes: Immediately flush eyes with plenty of water for at least 15 minutes and get medical attention.
Skin: Immediately flush skin with plenty of soap and water.

D. TOXICITY DATA:

Test	Species	Result	Classification
Oral LD ₅₀	Rat	> 3200 mg/kg	Slightly toxic
Skin Irritation	Guinea Pig	Strong Irritation	
Eye Irritation	Rabbit	Moderate Irritation	
Skin Absorption	Guinea Pig	No evidence at 20 mL/kg	

SECTION VII. PERSONAL PROTECTION AND CONTROLS

A. RESPIRATORY PROTECTION: None should be needed.

B. VENTILATION:

Local Exhaust: None should be needed.

Mechanical (General): Recommended

C. SKIN AND EYE PROTECTION:

Protective gloves should be worn.
Safety glasses with side shields or goggles or face shield 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 from contact with oxidizing materials.

Avoid 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

This chemical formulation has not been tested for environmental effects.

SECTION XI. TRANSPORTATION

For transportation information regarding this product, please phone the Eastman Kodak Distribution Center nearest you: Rochester, NY (716) 254-1300; Oak Brook, IL (312) 654-5300; Chamblee, GA (404) 455-0123; Dallas, TX (214) 241-1611; Whittier, CA (213) 946-1256; Honolulu, HI (808) 833-1661.

SECTION XII. REFERENCES

- Unpublished data, Health, Safety, and Human Factors Laboratory, Eastman Kodak Company, Rochester, New York.
- Hodge, K.C. and Sterner, J.W., American Industrial Hygiene Association Quarterly, 10, 93(1949).

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