

MATERIAL SAFETY DATA SHEET

EASTMAN KODAK COMPANY
343 State Street
Rochester, New York 14650

000147

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: 1/11/83 Revised Approved by U.S. Department of Labor

SECTION I. IDENTIFICATION

- Product Name: KODAK MICRODOL-X Developer
- Formula: Solid Mixture
- Formula Date: 7/21/81
- Kodak Photographic Chemicals Catalog Number(s): CAT 169 1955 - To Make 4 Ounces; CAT 196 9690 - To Make 1 Quart; CAT 196 9724 - To Make 1 Gallon; CAT 156 5647 - To Make 5 Gallons; CAT 123 0044 - To Make 1 Quart; CAT 123 0689 - To Make 128 Ounces
- Mixture Number: 202
- Kodak Accession Number: 354531
- Kodak Hazard Rating Codes: R: 1 S: 2 F: 0 C: 0

SECTION II. PRODUCT AND COMPONENT HAZARD DATA

A. COMPONENT(S):	Percent	TLV(R)	Kodak Accession No.	CAS Reg. No.
Sodium sulfite	70-80	---	901148	7757-83-7
Sodium chloride	20-30	---	901364	7647-14-5
*p-Methylaminophenol sulfate	1-5	---	900615	55-55-0

*Principal Hazardous Component(s)

B. PRECAUTIONARY LABEL STATEMENT(S):

Household label:

Contains p-methylaminophenol sulfate
CAUTION: REPEATED CONTACT MAY CAUSE SKIN IRRITATION AND ALLERGIC SKIN REACTION.
 AVOID BREATHING DUST.
 MAY BE HARMFUL IF SWALLOWED.
 If swallowed, induce vomiting.
 Call a physician at once.
KEEP OUT OF THE REACH OF CHILDREN

Commercial label:

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

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SECTION III. PHYSICAL DATA

- Appearance and Odor: Tan colored powder; odorless
- Boiling Point: Not Applicable
- Vapor Pressure: Negligible
- Evaporation Rate (n-butyl acetate = 1): Not Applicable
- Vapor Density (Air = 1): Not Applicable
- Volatile Fraction by Weight: Negligible
- Specific Gravity (H₂O = 1): GT 1.0
- pH: Not Applicable
- Solubility in Water (by Weight): Appreciable

SECTION IV. FIRE AND EXPLOSION HAZARD DATA

- Flash Point: None
- Flammable Limits in Air (% by volume in air): None
- Extinguishing Media: Not Applicable
- Special Fire Fighting Procedures: None
- Unusual Fire and Explosion Hazards: None

SECTION V. REACTIVITY DATA

- Stability: Stable
- Incompatibility: Mineral acids
- Hazardous Decomposition Products: Sulfur dioxide
- Hazardous Polymerization: Will not occur.

SECTION VI. TOXICITY AND HEALTH HAZARD DATA

A. THRESHOLD LIMIT VALUE: Not Applicable

B. EXPOSURE EFFECTS:

- Inhalation: Dust may cause upper respiratory tract irritation.
- Eyes: May cause eye irritation.
- Skin: Prolonged or repeated skin contact may cause skin irritation and may result in an allergic skin reaction.
- Ingestion: May be harmful if swallowed.

C. FIRST AID:

- Inhalation: Remove from exposure, treat symptomatically, and get medical attention if symptoms persist.
- Eyes: Immediately flush eyes with plenty of water and get medical attention.
- Skin: Flush skin with plenty of water.
If skin irritation or an allergic skin reaction develops, get medical attention.
- Ingestion: If swallowed, if conscious, 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 AS SOON AS POSSIBLE.

D. ANIMAL TOXICITY DATA

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

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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 should be worn.
 The routine use of a non-alkaline (acid) type of hand cleaner will help minimize the possibility of allergic skin reaction.

SECTION VIII. SPECIAL STORAGE AND HANDLING PRECAUTIONS

No special precautions are needed.

SECTION IX. SPILL, LEAK, AND DISPOSAL PROCEDURES

Wear suitable protective equipment.

Flush material to sewer with large amounts of water.

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 1 mg/L or less is not expected to cause an adverse environmental effect.

Federal, state, and local regulations take precedence.

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: 2,3,4,5,6

This chemical formulation has a moderate biological oxygen demand, and it is expected to cause some oxygen depletion in aquatic systems. It is expected to have a high potential to affect aquatic organisms and secondary waste treatment microorganisms. It is expected to have a low potential to affect 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 1 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.

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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. Hodge, H.C., and Sterner, J.H., Am. Indust. Hyg. Assn. Quart. 10:93-1949.
 2. Unpublished Data: Health, Safety, and Human Factors Laboratory. Eastman Kodak Company, Rochester, New York.
 3. Verschueren, K., Handbook of Environmental Data on Organic Chemicals, Van Nostrand Reinhold Company, New York, N.Y., 1977.
 4. 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. 68-01-007, May 1971.
 5. 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.
 6. Kodak Publication J-41, BOD5 and COD of Photographic Chemicals, Eastman Kodak Co., 1981.
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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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 @123-0689*
 @123-0044*
 @156-5647*
 @169-1955*
 @196-9690*
 @196-9724*
 81-0082

BUDGET NUMBER
A-21100-500-41000000

PURCHASE ORDER
SYRACUSE CITY SCHOOL DISTRICT
SHIP TO

INVOICE TO

Syracuse City School District
Accounts Payable Department
725 Harrison Street
Syracuse, New York 13210

BVA SUPPLY CENTER
1023 ERIE BLVD N.
SYRACUSE, NY 13206-0000
(315) 425-6125
ATTN: ACCOUNTS PAYABLE

ORDER NUMBER
K 17303E

REFERENCE THIS NUMBER
ON INVOICE

APPROVED BY

APPROVED DATE

UNIT QUANTITY	UNIT	UNIT PRICE	DESCRIPTION	DISCOUNT	NET AMOUNT
			1980-1989 SCHOOL ORDER		

- GENERAL INSTRUCTIONS TO VENDOR**
1. TERMS AND CONDITIONS - REVERSE SIDE
 2. INVOICE IN DUPLICATE
 3. MARK ALL BILLS' PACKAGES, INVOICES, CORRESPONDENCE WITH OUR PURCHASE ORDER NUMBER
 4. WE ARE EXEMPT FROM ALL TAXES BECAUSE WE ARE A POLITICAL SUBDIVISION OF THE STATE OF NEW YORK

5. IF PRICES ARE HIGHER THAN SPECIFIED APPROVAL MUST BE OBTAINED BEFORE SHIPMENT

VENDOR'S COPY

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