

KODAK VERSAMAT 641 Developer Starter, (Working Solution)

MATERIAL SAFETY DATA SHEET

200000468/F/USA

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: KODAK VERSAMAT 641 Developer Starter, (Working Solution)

Catalog Number(s): 160 8439; 188 1275 - To Make 9 1/2 gallon (U.S.)

Manufacturer/Supplier: EASTMAN KODAK COMPANY, Rochester, New York 14650

For Emergency Health, Safety & Environmental Information, call (585) 722-5151

For other information or to request an MSDS, call (800) 242-2424.

Synonym(s): KAN 471448; C-0161.050; Contains: PCD 4939 - Starter, PCD 2431 - Part A, PCD 10900 - Part B

2. COMPOSITION/INFORMATION ON INGREDIENTS

Weight % - Component - (CAS Registry No.)

85-90	Water (007732-18-5)
1-5	Sodium sulfite (007757-83-7)
1-5	Sodium erythroate (006381-77-7)
1-5	Sodium carbonate (000497-19-8)
< 1	Potassium bromide (007758-02-3)
< 1	1-phenyl-3-pyrazolidinone (000092-43-3)

3. HAZARDS IDENTIFICATION

CONTAINS: Sodium sulfite (007757-83-7), 1-phenyl-3-pyrazolidinone (000092-43-3)

WARNING!

MAY BE HARMFUL IF SWALLOWED

MAY CAUSE ALLERGIC SKIN REACTION

HMIS Hazard Ratings:

Health - 2 , Flammability - 0, Reactivity - 0, Personal Protection - B

NFPA Hazard Ratings:

Health - 1, Flammability - 0, Reactivity (Stability) - 0

NOTE: HMIS and NFPA hazard indexes involve data review and interpretation that may vary among companies. They are intended only for rapid, general identification of the magnitude of the potential hazards. The personal protection index is only intended for general guidance on personal protection equipment (PPE) that is suitable for the potential hazards of the material. PPE (e.g., respirators) may not be needed if engineering controls (e.g., local ventilation) are adequate. An asterisk (*), in the HMIS health field, designates potential chronic or target organ hazards. To adequately address safe handling, ALL information in this MSDS must be considered.

4. FIRST-AID MEASURES

Inhalation: If symptomatic, move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.

Eyes: Any material that contacts the eye should be washed out immediately with water. Get medical attention if symptoms occur.

Skin: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation or an allergic skin reaction develops, get medical attention. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Ingestion: Drink 1-2 glasses of water. Seek medical attention. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Use appropriate agent for adjacent fire.

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

Hazardous Combustion Products: None (noncombustible)

Unusual Fire and Explosion Hazards: None

6. ACCIDENTAL RELEASE MEASURES

Flush to sewer with large amounts of water. Otherwise, absorb spill with vermiculite or other inert material, then place in a container for chemical

waste. Clean surface thoroughly to remove residual contamination.

7. HANDLING AND STORAGE

Personal Precautionary Measures: Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion: No special precautionary measures should be needed under anticipated conditions of use.

Storage: Keep container closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

Eastman Kodak Company industrial hygiene guideline:

1-phenyl-3-pyrazolidinone: 0.2 mg/m³ TWA

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. A respirator should be worn if hazardous decomposition products are likely to be or have been released.

Respirator type: Acid gas. See Stability and Reactivity Section. If respirators are used, a program should be instituted to assure compliance with OSHA Standard 29 CFR 1910.134.

Eye Protection: It is a good industrial hygiene practice to minimize eye contact. Wear safety glasses with side shields (or goggles).

Skin Protection: Wear impervious gloves and protective clothing appropriate for the risk of exposure.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Liquid

Color: Yellow

Odor: Odorless

Specific Gravity at 21°C (70°F) (water = 1): 1.068-1.088

Vapor Pressure at 20°C (68°F): 24 mbar (18 mm Hg)
Vapor Density (Air = 1): 0.6
Volatile Fraction by Weight: 90 %
Boiling Point: >100°C (>212°F)
Solubility in Water: Complete
pH at 27°C (80°F): 9.58-9.68
Flash Point: None, noncombustible liquid

10. STABILITY AND REACTIVITY

Stability: Stable

Incompatibility: None with common materials and contaminants with which the material may reasonably come into contact.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Effects of Exposure:

Inhalation: Expected to be a low hazard for recommended handling. In contact with strong acids or if heated, sulfites may liberate sulfur dioxide gas. Sulfur dioxide gas is irritating to the respiratory tract. Some asthmatics or hypersensitive individuals may experience difficult breathing.

Eyes: No specific hazard known. May cause transient irritation.

Skin: May cause allergic skin reaction based on human experience.

Ingestion: May be harmful if swallowed. Some asthmatics or sulfite-sensitive individuals may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness and diarrhea.

12. ECOLOGICAL INFORMATION

The following properties are ESTIMATED from the components of the preparations.

Potential Toxicity

Fish LC50 mg/l:	>100
Daphnid EC50 mg/l:	>100
Algal IC50 mg/l:	>100

Organics Readily Degradable (>70%):	Yes (14 days)
Potential Bioaccumulation:	Log Pow <1
COD (approximate g/l):	35
BOD5 (approximate g/l):	13
Potential Toxicity	
Waste treatment microorganisms EC50 (mg/l):	>100

13. DISPOSAL CONSIDERATIONS

Flush to sewer with large amounts of water. Discharge, treatment, or disposal may be subject to national, state, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

- For transportation information regarding this product call the Kodak Worldwide Transportation Hazmat Hot Line: (585) 722-2400 between 8 a.m. and 5 p.m. (Eastern Standard Time), Monday through Friday.

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):

- 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: None

16. OTHER INFORMATION

US/Canadian Label Statements:

CONTAINS: Sodium sulfite (007757-83-7), 1-phenyl-3-pyrazolidinone

(000092-43-3)

WARNING!

MAY BE HARMFUL IF SWALLOWED

MAY CAUSE ALLERGIC SKIN REACTION

Avoid breathing mist or vapor.

Avoid contact with eyes, skin, and clothing.

Use with adequate ventilation.

Wash thoroughly after handling.

FIRST AID: If swallowed, seek medical advice. Never give anything by mouth to an unconscious person. In case of contact, immediately flush eyes and skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Keep out of reach of children.

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

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

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.

R-1, S-2, F-0, C-0

[please read the security and privacy notice](#)