

Material Safety Data Sheet

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1. Identification of the substance/mixture and of the company/undertaking

Product name: KODAK EKTACOLOR Digital Developer Replenisher RT, MX2053, Working Solution

Product code: 8531691 - Working Solution

Supplier: EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York 14650

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

For further information about this product, call (800) 242-2424.

Synonyms: None.

Product Use: photographic processing chemical (developer/activator), For industrial use only.

2. Hazards identification

CONTAINS: 4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine (92-09-1)

WARNING!
MAY CAUSE ALLERGIC SKIN REACTION

HMIS III Hazard Ratings: Health - 2, Flammability - 0, Physical Hazard - 0

NFPA Hazard Ratings: Health - 2, Flammability - 0, Instability - 0

NOTE: HMIS III and NFPA 704 (2007) 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. To adequately address safe handling, ALL information in this MSDS must be considered.

3. Composition/information on ingredients

Weight percent	Components - (CAS-No.)
1 - 5	Potassium carbonate (584-08-7)
0.1 - < 1	4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine (92-09-1)

4. First aid measures

Inhalation: If inhaled, remove to fresh air. Get medical attention if symptoms occur.

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

Skin: In case of contact, immediately flush 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 re-use. Destroy or thoroughly clean contaminated shoes.

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Ingestion: If swallowed, get medical attention if symptoms occur.

5. Fire-fighting measures

Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special Fire-Fighting Procedures: None (noncombustible)

Hazardous Combustion Products: None (noncombustible)

Unusual Fire and Explosion Hazards: None.

6. Accidental release measures

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 precautions: Avoid prolonged or repeated breathing of mist or vapour. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion: No special technical protective measures required.

Storage: Keep container tightly closed.

8. Exposure controls/personal protection

Occupational exposure controls: Not established

Ventilation: Good general ventilation should be used. Ventilation should be sufficient so that applicable occupational exposure limits are not exceeded. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory protection may be needed in special circumstances.

Respiratory protection: None should be needed under normal conditions of use.

Eye protection: Wear safety glasses with side shields (or goggles).

Hand protection: Wear impervious gloves and protective clothing appropriate for the risk of exposure.

9. Physical and chemical properties

Physical form: liquid

Colour: no data available

Odour: no data available

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Specific gravity: 1.029

Vapour pressure: 24 mbar (18.0 mm Hg)

Vapour density: 0.6

Boiling point/boiling range: 100 °C (212.0 °F)

Water solubility: complete

pH: 10.8

Flash point: does not flash

10. Stability and reactivity

Stability: Stable under normal conditions.

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

Hazardous decomposition products: None under normal conditions of use.

Hazardous Polymerization: Hazardous polymerisation does not occur.

11. Toxicological information

Effects of Exposure

General advice:

Contains: 4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine. May cause kidney damage based on animal data.

Inhalation: Expected to be a low hazard for recommended handling.

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

Skin: May cause an allergic skin reaction.

Ingestion: Expected to be a low ingestion hazard. May cause irritation of the gastrointestinal tract.

Data for Potassium carbonate (CAS 584-08-7):

Acute Toxicity Data:

Oral LD50 (rat): 1,870 mg/kg

Data for 4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine (CAS 92-09-1):

Acute Toxicity Data:

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Oral LD50 (rat): 200 mg/kg

- Skin Sensitization (guinea pig): moderate (Causes sensitization on guinea-pigs.)

Definitions for the following section(s): LOEL =lowest-observed-effect level, LOAEL = lowest-observed-adverse-effect, NOAEL = no observed-adverse-effect level, NOEL =no-observed-effect level.

Carcinogenicity:

- Dermal study (mouse, 2 years): NOEL; 62 mg/kg/day (only dose tested)

12. Ecological information

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

Potential Toxicity:

Toxicity to fish (LC50): 10 - 100 mg/l

Toxicity to daphnia (EC50): 10 - 100 mg/l

Toxicity to algae (IC50): > 100 mg/l

Persistence and degradability: Readily biodegradable.

13. Disposal considerations

Discharge, treatment, or disposal may be subject to federal, state, commonwealth, provincial, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

Not regulated for all modes of transportation.

For more transportation information, go to: www.kodak.com/go/ship.

15. Regulatory information

Notification status

Regulatory List	Notification status
TSCA	All listed
DSL	Not all listed
NDSL	Listed
EINECS	Not all listed
ELINCS	None listed
NLP	None listed

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AICS	Not all listed
IECS	Not all listed
ENCS	Not all listed
ECl	Not all listed
NZloC	Not all listed
PICCS	Not all listed

"Not all listed" indicates one or more component is either not on the public Inventory or is subject to exemption requirements. If additional information is needed contact Kodak.

Other regulations

American Conference of Governmental Industrial Hygienists (ACGIH):	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
International Agency for Research on Cancer (IARC):	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
U.S. National Toxicology Program (NTP):	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
U.S. Occupational Safety and Health Administration (OSHA):	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
California Prop. 65	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
U.S. - CERCLA/SARA (40 CFR § 302.4 Designation of hazardous substances):	No components of this product are subject to the SARA Section 302 (40 CFR 302.4) reporting requirements.
U.S. - CERCLA/SARA - Section 302 (40 CFR § 355 Appendices A and B - The List of Extremely Hazardous Substances and Their Threshold Planning Quantities):	No components of this product are subject to the SARA Section 302 (40 CFR 355) reporting requirements.
U.S. - CERCLA/SARA - Section 313 (40 CFR § 372.65 Toxic Chemical Release Reporting):	No components of this product are subject to the SARA Section 313 (40 CFR 372.65) reporting

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U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances:	requirements. No components found on the California Director's List of Hazardous Substances.
U.S. - California - 8 CCR Section 5200-5220 - Specifically Regulated Carcinogens:	No components found on the California Specifically Regulated Carcinogens List.
U.S. - California - 8 CCR Section 5203 Carcinogens:	No components found on the California Section 5203 Carcinogens List.
U.S. - California - 8 CCR Section 5209 Carcinogens:	No components found on the California Section 5209 Carcinogens List.
U.S. - Massachusetts - General Law Chapter 111F (MGL c 111F) - Hazardous Substances Disclosure by Employers (a.k.a. Right to Know Law):	No components regulated under the Massachusetts Hazardous Substances Disclosure by Employers Law.
U.S. - Minnesota Employee Right-to-Know (5206.0400, Subpart 5. List of Hazardous Substances):	No components found on the Minnesota Employee Right-to-Know List of Hazardous Substances.
U.S. - New Jersey - Worker and Community Right to Know Act (N.J.S.A. 34:5A-1):	No components regulated under the New Jersey Worker and Community Right-to-Know Act.
U.S. - Pennsylvania - Part XIII. Worker and Community Right-to-Know Act (Chapter 323 Hazardous Substance List, Appendix A):	Water, Sodium sulphate
U.S. - Rhode Island - Title 28 Labor and Labor Relations (Chapters 28-21 Hazardous Substance Right-to-Know Act):	No components regulated under the Rhode Island Hazardous Substance Right-to-Know Act.

16. Other information

The data below reflects current legislative requirements whereas the product in your possession may carry a different version of the label depending on the date of manufacture.

US/Canadian Label Statements:

KODAK EKTACOLOR Digital Developer Replenisher RT, MX2053, Working Solution
CONTAINS: 4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine (92-09-1).
WARNING! MAY CAUSE ALLERGIC SKIN REACTION.

Avoid prolonged or repeated breathing of mist or vapour. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash thoroughly after handling. **FIRST AID:** If inhaled, move to fresh air. If not breathing, give artificial respiration. If breathing is difficult or if cyanotic, give oxygen. Keep out of reach of children. Do not handle or use until safety precautions in Material Safety Data Sheet (MSDS) have been read and understood. Since emptied containers retain product residue, follow label warnings even after container is emptied. **IN CASE OF FIRE:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. **IN CASE OF SPILL:** Absorb spill with vermiculite

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or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Additional Components Include: Water (7732-18-5), Potassium carbonate (584-08-7), Triethanolamine (102-71-6), 2,2'-(hydroxyimino)bis ethanesulfonic acid disodium salt (133986-51-3).

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. The information relating to the working solution is for guidance purposes only, and is based on correct mixing and use of the product according to instructions.

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