

Safety Data Sheet

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Kodak alaris

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

Product name: KODAK XTOL Developer, Part A

Product code: 5160361 - Part A

Synonyms: PCD 8008

Relevant identified uses of the substance or mixture and uses advised against:

Identified uses: photographic processing chemical (developer/activator). For industrial use only.

Supplier: Kodak Alaris Inc., 2400 Mount Read Boulevard, Rochester, NY 14615

IN EMERGENCY, telephone: 1-800-424-9300 or +1 703-527-3887.

For further information about this product, email EHS-Questions@Kodakalaris.com.

2. Hazards identification

Classification of the chemical in accordance with paragraph (d) of 29 CFR 1910.1200:

Hazard class	Hazard category	Route of exposure
Acute toxicity	Category 4	Inhalation
Acute toxicity	Category 4	Oral
Acute toxicity	Category 4	Dermal
Eye irritation	Category 2A	--
Skin sensitisation	Category 1	--
Reproductive toxicity	Category 2	Oral

GHS-Labeling

Contains:

Sodium sulphite (7757-83-7), Sodium tetraborate, pentahydrate (12179-04-3), Pentetic acid, pentasodium salt (140-01-2), 4-hydroxymethyl-4-methyl-1-phenyl-3-pyrazolidinone (13047-13-7)

Symbol(s):

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Signal word: Warning

Hazard statements: Harmful if inhaled. Harmful if swallowed. Harmful in contact with skin. Causes serious eye irritation. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child if swallowed.

Precautionary statements:

Prevention: Use only outdoors or in a well-ventilated area. Use personal protective equipment as required. Wear protective gloves/ protective clothing/ eye protection/ face protection. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Response: IF exposed or concerned: Get medical advice/ attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse. IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.

Storage: Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulation.

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

NFPA Hazard Ratings: Health - 3, 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

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Weight percent	Components - (CAS-No.)
90 - 95	Sodium sulphite (7757-83-7)
1 - 5	Sodium tetraborate, pentahydrate (12179-04-3)
1 - 5	Pentetic acid, pentasodium salt (140-01-2)
0.1 - < 1	4-hydroxymethyl-4-methyl-1-phenyl-3-pyrazolidinone (13047-13-7)

4. First aid measures

Inhalation: IF INHALED: Call a POISON CENTER or doctor/ physician if you feel unwell. Call a POISON CENTER or doctor/ physician if you feel unwell.

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Skin: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before re-use.

Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.

Most important symptoms and effects, both acute and delayed: No information available.

Indication of any immediate medical attention and special treatment needed:

Treatment: No information available.

5. Firefighting measures

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

Special hazards arising from the substance or mixture

Hazardous Combustion Products: None (noncombustible), (see also Hazardous Decomposition Products sections.)

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing. Fire or excessive heat may produce hazardous decomposition products.

Unusual Fire and Explosion Hazards: None.

6. Accidental release measures

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Personal precautions, protective equipment and emergency procedures: Refer to protective measures listed in sections 7 and 8.

Methods and materials for containment and cleaning up: Shovel into suitable container for disposal. Clean surface thoroughly to remove residual contamination.

Environmental precautions: No information available.

7. Handling and storage

Precautions for safe handling

Personal precautions: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Use personal protective equipment as required. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product.

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

Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section.)

8. Exposure controls/personal protection

Occupational exposure controls

Chemical Name	Regulatory List	Value Type	Value
Sodium tetraborate, pentahydrate	ACGIH	Time weighted average	2 mg/m ³
			<i>Form of exposure: inhalable fraction</i>
Sodium tetraborate, pentahydrate		Short term exposure limit	6 mg/m ³
			<i>Form of exposure: inhalable fraction</i>

Appropriate engineering controls: 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.

Individual protection measures, such as personal protective equipment

Eye protection: Wear eye/face protection.

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Hand protection: Wear protective gloves.

Respiratory protection: None should be needed. If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn.

Respirator type: N95 Particulate Filter. A respirator should be worn if hazardous decomposition products are likely to be or have been released. Respirator type: acid gas If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

9. Physical and chemical properties

Physical form: solid (powder)

Colour: off-white

Odour: odourless

Specific gravity: No data available

Vapour pressure: negligible

Vapour density: No data available

Melting point/range: No data available

Water solubility: complete

pH: Not applicable

Flash point: Not applicable

Evaporation rate: No data available

Flammability (Solid; gas): No data available

Upper explosion limit: No data available

Lower explosion limit: No data available

Partition coefficient: n-octanol/water: No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

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Viscosity: No data available

Explosive properties: No data available

Oxidizing properties: No data available

10. Stability and reactivity

Reactivity: No data available

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Hazardous polymerisation does not occur.

Conditions to avoid: No data available

Incompatible materials: Acids. Contact with strong acids liberates sulphur dioxide.

Hazardous decomposition products: Sulphur oxides

11. Toxicological information

Effects of Exposure

General advice:

Contains: Sodium tetraborate, pentahydrate. Based on repeated-dose ingestion studies in animals, may cause adverse reproductive and developmental effects.

Contains: 4-hydroxymethyl-4-methyl-1-phenyl-3-pyrazolidinone. May cause adverse reproductive effects such as infertility based on animal data. Based on repeated-dose ingestion studies in animals, this chemical may cause blood, testicular, and adverse reproductive effects.

Inhalation: Harmful if inhaled. In contact with strong acids or if heated, sulphites may liberate sulphur dioxide gas. Sulphur dioxide gas is irritating to the respiratory tract. Some asthmatics or hypersensitive individuals may experience difficult breathing.

Eyes: Causes serious eye irritation.

Skin: Harmful in contact with skin. May cause an allergic skin reaction.

Ingestion: Harmful if swallowed. Suspected of damaging fertility or the unborn child if swallowed. Some asthmatics or sulfite-sensitive individuals may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness and diarrhea.

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Data for Sodium sulphite (CAS 7757-83-7):

Acute Toxicity Data:

Oral LD50 (Rat): 820 mg/kg

- Inhalation LC50 (Rat): > 22 mg/l / 1 hr
- Skin irritation: none
- Eye irritation: slight; washing palliative

Data for Sodium tetraborate, pentahydrate (CAS 12179-04-3):

Acute Toxicity Data:

Oral LD50 (Rat): 2,403 mg/kg

- Dermal LD50 (Rabbit): > 2,000 mg/kg
- Skin irritation: none
- Skin Sensitization: none
- Eye irritation: Irritating to eyes.

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.

Reproductive Toxicity Data:

- (male and female Rat): LOEL for reproductive toxicity; 336 mg/kg/day

Data for Pentetic acid, pentasodium salt (CAS 140-01-2):

Acute Toxicity Data:

Oral LD50 (male Rat): 3,200 mg/kg

- Oral LD50 (female Rat): 2,263 mg/kg
- Skin irritation: irritating
- Skin Sensitization: none
- Eye irritation: Corrosive

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.

Repeated dose toxicity:

- Oral (11 days, male Rat): NOEL; 100 mg/kg/day

Data for 4-hydroxymethyl-4-methyl-1-phenyl-3-pyrazolidinone (CAS 13047-13-7):

Acute Toxicity Data:

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Oral LD50 (Rat): 566 mg/kg

- Oral (Mouse): 283 mg/kg
- Oral LD50: 283 mg/kg
- Oral LD50 (Rat): 566 mg/kg
- Dermal LD50: > 1,000 mg/kg
- Skin irritation: slight
- Skin irritation: slight exacerbation (repeated skin application)
- Skin Sensitization: slight
- Eye irritation (unwashed eyes): strong
- Eye irritation (washed eyes): slight to moderate

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.

Repeated dose toxicity:

- Oral (12-day, Rat): NOEL; 88 mg/kg/day
- Oral (12-day, Rat): Lowest observed effect level; 440 mg/kg/day (target organ effects: blood, target organ effects: testes)
- Oral (28-day, Rat): NOEL; 10 mg/kg/day
- Oral (28-day, Rat): Lowest observed effect level; 40 mg/kg/day (target organ effects: blood, target organ effects: testes)

Carcinogenicity

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.

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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.

12. Ecological information

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

Potential Toxicity:

Toxicity to fish (LC50): > 100 mg/l

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

Persistence and degradability: Not readily biodegradable.

Bioaccumulative potential

No data available

Mobility in soil

No information available.

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

TSCA

Notification status

Not all listed

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DSL	Not all listed
NDSL	None listed
EINECS	Not all listed
ELINCS	None listed
NLP	None listed
AICS	Not all listed
IECS	All listed
ENCS	All listed
ECI	Not all listed
NZIoC	All listed
PICCS	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

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 requirements.
U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances:	Sodium tetraborate, pentahydrate
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.

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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):	Sodium tetraborate, pentahydrate
U.S. - Minnesota Employee Right-to-Know (5206.0400, Subpart 5. List of Hazardous Substances):	Sodium tetraborate, pentahydrate
U.S. - Pennsylvania - Part XIII. Worker and Community Right-to-Know Act (Chapter 323 Hazardous Substance List, Appendix A):	Sodium sulphite , Sodium tetraborate, pentahydrate
U.S. - New Jersey - Worker and Community Right to Know Act (N.J.S.A. 34:5A-1):	Sodium tetraborate, pentahydrate

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 XTOL Developer, Part A

Contains:

Sodium sulphite (7757-83-7), Sodium tetraborate, pentahydrate (12179-04-3), Pentetic acid, pentasodium salt (140-01-2), 4-hydroxymethyl-4-methyl-1-phenyl-3-pyrazolidinone (13047-13-7)

Symbol(s):



Signal word: Warning

Hazard statements: Harmful if inhaled. Harmful if swallowed. Harmful in contact with skin. Causes serious eye irritation. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child if swallowed.

Precautionary statements:

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Prevention: Use only outdoors or in a well-ventilated area. Use personal protective equipment as required. Wear protective gloves/ protective clothing/ eye protection/ face protection. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Response: IF exposed or concerned: Get medical advice/ attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse. IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.

Storage: Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulation.

FIRST AID: IF INHALED: Call a POISON CENTER or doctor/ physician if you feel unwell. Call a POISON CENTER or doctor/ physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before re-use. IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. 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:** Shovel into suitable container for disposal. Clean surface thoroughly to remove residual contamination.

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