

Safety Data Sheet

Revision Date: 02/26/2014
000000042751/Version: 2.0
Print Date: 05/26/2015
Page: 1/11

Kodak alaris

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

Product name: KODAK XTOL Developer, Working solution

Product code: 5160361 - Working solution

Synonyms: None.

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
Toxic to reproduction	Category 2	Oral

GHS-Labeling

Contains:

Sodium tetraborate, decahydrate (1303-96-4)

Symbol(s):



Signal word: Warning

Hazard statements: Suspected of damaging fertility or the unborn child if swallowed.

Precautionary statements:

Safety Data Sheet

Revision Date: 02/26/2014
000000042751/Version: 2.0
Print Date: 05/26/2015
Page: 2/11

Prevention: Use personal protective equipment as required. 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.

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 - 1, 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

Weight percent	Components - (CAS-No.)
5 - < 10	Sodium sulphite (7757-83-7)
0.1 - 1	Sodium erythroate (6381-77-7)
0.1 - < 1	Sodium tetraborate, decahydrate (1303-96-4)
0.1 - 1	Pentetic acid, pentasodium salt (140-01-2)

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. If easy to do, remove contact lens, if worn. Get medical attention if symptoms occur.

Skin: Wash off with soap and water. Get medical attention if symptoms occur.

Ingestion: If swallowed, DO NOT induce vomiting. Call a physician or poison control centre immediately. Never give anything by mouth to an unconscious person.

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

Safety Data Sheet

Revision Date: 02/26/2014
000000042751/Version: 2.0
Print Date: 05/26/2015
Page: 3/11

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

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: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

Environmental precautions: No information available.

7. Handling and storage

Precautions for safe handling

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. 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.)

Safety Data Sheet

Revision Date: 02/26/2014
000000042751/Version: 2.0
Print Date: 05/26/2015
Page: 4/11

8. Exposure controls/personal protection

Occupational exposure controls

Chemical Name	Regulatory List	Value Type	Value
Sodium tetraborate, decahydrate	ACGIH	time weighted average	2 mg/m3
			<i>Form of exposure: inhalable fraction</i>
Sodium tetraborate, decahydrate		Short term exposure limit	6 mg/m3
			<i>Form of exposure: inhalable fraction</i>
Sulphur dioxide	OSHA	Short term exposure limit time weighted average	0.25 ppm 5 ppm 13 mg/m3

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 safety glasses with side shields (or goggles).

Hand protection: For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.

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

Colour: No data available

Odour: odourless

Specific gravity: 1.082 - 1.088

Vapour pressure: No data available

Safety Data Sheet

Revision Date: 02/26/2014
000000042751/Version: 2.0
Print Date: 05/26/2015
Page: 5/11

Vapour density: No data available

Boiling point/boiling range: > 35 °C (> 95.0 °F) (estimated)

Water solubility: complete

pH: 8.15 - 8.25

Flash point: does not flash

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

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

Safety Data Sheet

Revision Date: 02/26/2014
000000042751/Version: 2.0
Print Date: 05/26/2015
Page: 6/11

11. Toxicological information

Effects of Exposure

General advice:

Contains: Sodium tetraborate, decahydrate. Based on repeated-dose ingestion studies in animals, may cause adverse reproductive and developmental effects. However, the doses administered were many times those to which humans would normally be exposed.

Inhalation: Expected to be a low hazard for recommended handling. 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: No specific hazard known. May cause transient irritation.

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

Ingestion: 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.

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 erythrobate (CAS 6381-77-7):

Data for Sodium tetraborate, decahydrate (CAS 1303-96-4):

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

Safety Data Sheet

Revision Date: 02/26/2014
000000042751/Version: 2.0
Print Date: 05/26/2015
Page: 7/11

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

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: > 100 mg/l

Persistence and degradability: 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

Safety Data Sheet

Revision Date: 02/26/2014
000000042751/Version: 2.0
Print Date: 05/26/2015
Page: 8/11

Regulatory List	Notification status
TSCA	All listed
DSL	All listed
NDSL	None listed
EINECS	Not all listed
ELINCS	None listed
NLP	None listed
AICS	All listed
IECS	All listed
ENCS	All listed
ECI	All listed
NZIoC	All listed
PICCS	All listed
TSCA 12(b)	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):	Group 2A - Probably Carcinogenic to Humans: Sodium tetraborate, decahydrate
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):	OSHA Carcinogen or Potential Carcinogen: Sodium tetraborate, decahydrate
California Prop. 65	WARNING: This product contains a chemical known to the State of

Safety Data Sheet

Revision Date: 02/26/2014

000000042751/Version: 2.0

Print Date: 05/26/2015

Page: 9/11

	California to cause birth defects or 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 requirements.
U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances:	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 sulphite

Safety Data Sheet

Revision Date: 02/26/2014
000000042751/Version: 2.0
Print Date: 05/26/2015
Page: 10/11

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, Working solution

Contains:

Sodium tetraborate, decahydrate (1303-96-4)

Symbol(s):



Signal word: Warning

Hazard statements: Suspected of damaging fertility or the unborn child if swallowed.

Precautionary statements:

Prevention: Use personal protective equipment as required. 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.

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, remove to fresh air. Get medical attention if symptoms occur. Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lens, if worn. Get medical attention if symptoms occur. Wash off with soap and water. Get medical attention if symptoms occur. If swallowed, DO NOT induce vomiting. Call a physician or poison control centre immediately. Never give anything by mouth to an unconscious person. 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 or other inert material,

Safety Data Sheet

Revision Date: 02/26/2014

000000042751/Version: 2.0

Print Date: 05/26/2015

Page: 11/11

then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Additional Components Include: Water (7732-18-5) , Sodium erythroate (6381-77-7) , Sodium tetraborate, decahydrate (1303-96-4) , Pentetic acid, pentasodium salt (140-01-2).

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-1, F-0, C-0