

# Safety Data Sheet

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**Kodak alaris**

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

**Product name:** KODAK EKTACOLOR PRO Bleach Fix and Replenisher RT, RA-4, Part A

**Product code:** 5077607 - Part A

**Synonyms:** PCD F6565

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

**Identified uses:** photographic processing chemical (bleach/bleach fixer). 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](mailto: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	Oral
Skin irritation	Category 2	--
Eye irritation	Category 2A	--

### GHS-Labeling

**Contains:**

Ammonium thiosulphate (7783-18-8), Ammonium bisulphite (10192-30-0), Sodium bisulphite (7631-90-5), Ammonium sulphite (10196-04-0)

**Symbol(s):**



**Signal word:** Warning

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## Hazard statements:

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.

## Hazard statements:

## Precautionary statements:

**Prevention:** Wear protective gloves/eye protection/face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

**Response:** 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 occurs: Get medical advice/ attention. Take off contaminated clothing and wash 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.

## Other hazards which do not result in classification:

Dried product residue can act as a reducing agent.

**HMIS III Hazard Ratings:** Health - 1, Flammability - 1, Physical Hazard - 0

**NFPA Hazard Ratings:** Health - 3, Flammability - 1, 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.)
35 - 40	Ammonium thiosulphate (7783-18-8)
5 - 10	Sodium bisulphite (7631-90-5)
1 - 5	Ammonium bisulphite (10192-30-0)
1 - 5	Ammonium sulphite (10196-04-0)
1 - 5	Ammonium acetate (631-61-8)

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## 4. First aid measures

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

**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 occurs: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.

**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 water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Flush with plenty of water.

**Special hazards arising from the substance or mixture**

**Hazardous Combustion Products:** Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, (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:** Dried product residue can act as a reducing agent. Reacts violently with oxidizing materials. May cause spontaneous heating and ignition when absorbed on combustible, porous material (e.g. rags, paper, sawdust, cotton, clothing).

## 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.

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**Environmental precautions:** Flush with plenty of water.

**For Large Spills:** Flush with plenty of water.

## 7. Handling and storage

### Precautions for safe handling

**Personal precautions:** Avoid breathing mist or vapour at concentrations greater than the exposure limits. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

**Prevention of Fire and Explosion:** Keep from contact with oxidizing materials, highly oxygenated or halogenated solvents, organic compounds containing reducible functional groups. Remove and wash contaminated clothing promptly.

**Conditions for safe storage, including any incompatibilities:** Store in original container. Keep container tightly closed to prevent the loss of water. Keep away from incompatible substances (see Incompatibility section.)

## 8. Exposure controls/personal protection

### Occupational exposure controls

Chemical Name	Regulatory List	Value Type	Value
Sodium bisulphite	ACGIH	time weighted average	5 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 eye/face protection.

**Hand protection:** Wear protective gloves.

**Respiratory protection:** None should be needed under normal conditions of use. A respirator must be worn if hazardous decomposition products are likely to be or have been released. If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

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## 9. Physical and chemical properties

**Physical form:** liquid

**Colour:** clear

**Odour:** ammonia

**Specific gravity:** 1.2820

**Vapour pressure (at 20.0 °C (68.0 °F)):** 24 mbar (18.0 mm Hg)

**Vapour density:** 0.6

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

**Water solubility:** complete

**pH:** 5.5

**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

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**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, Strong bases, sodium hypochlorite (bleach), Halogenated compounds, Oxidizing agents. Contact with sodium hypochlorite (bleach) may form chloramine (toxic gas). Contact with strong acids liberates sulphur dioxide. Contact with base liberates flammable material. Contact with base liberates ammonia.

**Hazardous decomposition products:** Ammonia, chloramine, Sulphur oxides, Nitrogen oxides (NO<sub>x</sub>)

## 11. Toxicological information

### Effects of Exposure

**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:** Causes serious eye irritation.

**Skin:** Causes skin irritation.

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

### Data for Ammonium thiosulphate (CAS 7783-18-8):

#### Acute Toxicity Data:

Oral LD50 (male rat): 500 - 5,000 mg/kg

- Inhalation (rat): 2260 mg/m<sup>3</sup> / 4 hr
- Eye irritation: none

### Data for Sodium bisulphite (CAS 7631-90-5):

#### Acute Toxicity Data:

Oral LD50 (rat): > 1,600 mg/kg

- Dermal LD50 (rat): 2,000 mg/kg
- Eye irritation (May irritate eyes.): mild

### Data for Ammonium sulphite (CAS 10196-04-0):

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## Acute Toxicity Data:

Oral LD50 (rat): 2,528 mg/kg

- Inhalation LC50 (rat): > 2.46 mg/l / 6 hr
- Dermal LD50 (guinea pig): >1.0 g/kg
- Skin irritation: slight

## 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): > 100 mg/l

**Persistence and degradability:** Not applicable

### 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](http://www.kodak.com/go/ship).

## 15. Regulatory information

### Notification status

**Regulatory List**

**Notification status**

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TSCA	All listed
DSL	All listed
NDSL	None listed
EINECS	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

"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



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	California to cause cancer, birth defects, or any other reproductive harm.
U.S. - CERCLA/SARA (40 CFR § 302.4 Designation of hazardous substances):	Sodium bisulphite , Ammonium bisulphite , Ammonium sulphite , Ammonium acetate
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):	Ammonium thiosulphate , Ammonium bisulphite , Ammonium sulphite , Ammonium acetate
U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances:	Sodium bisulphite , Ammonium bisulphite , Ammonium sulphite , Ammonium acetate
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):	Ammonium thiosulphate , Sodium bisulphite , Ammonium bisulphite , Ammonium sulphite , Ammonium acetate
U.S. - Minnesota Employee Right-to-Know (5206.0400, Subpart 5. List of Hazardous Substances):	Sodium bisulphite
U.S. - New Jersey - Worker and Community Right to Know Act (N.J.S.A. 34:5A-1):	Sodium bisulphite , Ammonium bisulphite , Ammonium sulphite , Ammonium acetate
U.S. - Pennsylvania - Part XIII. Worker and Community Right-to-Know Act (Chapter 323 Hazardous Substance List, Appendix A):	Water , Ammonium thiosulphate , Sodium bisulphite , Ammonium bisulphite , Ammonium sulphite , Ammonium acetate

### 16. Other information

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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 PRO Bleach Fix and Replenisher RT, RA-4, Part A

#### Contains:

Ammonium thiosulphate (7783-18-8), Ammonium bisulphite (10192-30-0), Sodium bisulphite (7631-90-5), Ammonium sulphite (10196-04-0)

#### Symbol(s):



**Signal word:** Warning

#### Hazard statements:

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.

#### Hazard statements:

#### Precautionary statements:

**Prevention:** Wear protective gloves/eye protection/face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

**Response:** 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 occurs: Get medical advice/ attention. Take off contaminated clothing and wash 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, remove to fresh air. Get medical attention if symptoms occur. 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

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water. If skin irritation occurs: Get medical advice/ attention. Take off contaminated clothing and wash before reuse. 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 water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Flush with plenty of water. **IN CASE OF SPILL:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. For Large Spills: Flush with plenty of water. Additional Components Include: Water (7732-18-5) .

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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 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.

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