Material Safety Data Sheet

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

Product name: KODAK EKTACOLOR Processing Cartridge 92/110, Bleach Fix, Part A

Product code: 1440775 - Bleach Fix, Part A

Supplier: KODAK AUSTRALASIA Pty. Ltd., Level 2, 436 Johnston Street, Abbotsford, Victoria, 3067

For Chemical Emergency Information, in Australia call 1800 033111 (24 hour service Australia-wide); in New Zealand call 0800 734 607 (24 hour service); in Asia call +86 21 63500836

For Other Information, call 61 3 8417 8000.

Synonyms: PCD 6516

Product Use: photographic processing chemical (bleach/bleach fixer), For industrial use only.

2. Hazards identification

STATEMENT OF HAZARDOUS NATURE: Not classified as hazardous according to criteria of Australian Safety and Compensation Council

Contains no scheduled poisons

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)

4. First aid measures

Inhalation: If symptomatic, move to fresh air. Get medical attention if symptoms occur.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lens, if worn. Get medical attention.

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

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

5. Fire-fighting measures

Hazchem Code: Not specified

Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Flush with plenty of water.

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

Hazardous Combustion Products: Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, (see also Hazardous Decomposition Products sections.)

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

Absorb spill with vermiculite or other inert material. Collect in a noncombustible container for prompt disposal. Contaminated absorbent should be disposed of in accordance with local regulations. Clean surface thoroughly to remove residual contamination. Flush with plenty of water.

7. Handling and storage

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.

Storage: 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	Exposure Standards	time weighted average	5 mg/m3
Sulphur dioxide		time weighted average	2 ppm 5.2 mg/m3
		Short term exposure limit	5 ppm 13 mg/m3
Sodium bisulphite		time weighted average	5 mg/m3
Sodium bisulphite	New Zealand	time weighted average	5 mg/m3
Sulphur dioxide		time weighted average	2 ppm 5.2 mg/m3
		Short term exposure limit	5 ppm 13 mg/m3
Sodium bisulphite		time weighted average	5 mg/m3

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. If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. Respirator type: full-face cartridge respirator with acid gas cartridge and N95 filter.

If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

Eye protection: If a full-face respirator is not worn, wear vapour-tight chemical goggle and a face shield.

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

9. Physical and chemical properties

Physical form: liquid

Colour: light yellow

Odour: slight ammonia

Specific gravity: 1.294

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

Vapour density: 0.6

Volatile fraction by weight: 45 - 50 %

Boiling point/boiling range: 100.0 °C (212.0 °F)

Water solubility: complete

pH: 5.3

Flash point: does not flash

Flammability Limits: Not specified

10. Stability and reactivity

Stability: Stable under normal conditions.

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

Hazardous decomposition products: Ammonia, chloramine, Sulphur oxides, nitrogen oxides (NOx).

Hazardous Polymerization: Hazardous polymerisation does not occur.

11. Toxicological information

Effects of Exposure

Inhalation: Expected to be a low hazard for recommended handling. Some asthmatics or hypersensitive individuals may experience difficulty breathing if exposed to aerosols or decomposition products that are not anticipated during normal use.

Eyes: May cause eye irritation.

Skin: Expected to be a low hazard for recommended handling. This material has a low potential to cause allergic skin reactions; however, cases of human skin sensitization have been reported.

Ingestion: Expected to be a low ingestion hazard. Some asthmatics or sulfite-sensitive individuals may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness and diarrhea.

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

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

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

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

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

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

- Eye irritation: Eye irritation

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 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
TSCA	All listed
DSL	All listed
DSL	All listed
NDSL	None listed
NDSL	None listed
EINECS	All listed
EINECS	All listed
ELINCS	None listed
ELINCS	None listed
NLP	None listed
AICS	All listed
AICS	All listed
IECS	All listed
IECS	All listed
ENCS	All listed
ENCS	All listed
ECI	All listed
ECI	All listed
NZIoC	All listed
NZIoC	All listed
PICCS	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.

Poisons Schedule: Not specified

Australian Safety and Compensation Council: none

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.
Australia National Model Regulations for the Control of Scheduled Carcinogenic Substances	No components listed

16. Other information

Australian Safety and Compensation Council Labeling:

Not classified as hazardous according to criteria of Australian Safety and Compensation Council

National Health and Medical Research Council Standard for the Uniform Scheduling of Drugs and Poisons Labeling:

CONTAINS NO SCHEDULED POISONS
First aid: No first aid instructions are recommended for labelling purposes.

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.