Material Safety Data Sheet

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

Product name: KODAK Pre-Bleach and Replenisher II, Process E-6

Product code: 1286228

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 6576

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 %	Components (CAS-No.)
20 - 25	Sodium formaldehyde bisulphite (870-72-4)
5 - 10	Potassium sulphite (10117-38-1)
1 - 5	Ethylenediaminetetraacetic acid (60-00-4)
0.1 - <1	1-Thioglycerol (96-27-5)

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. 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.

Ingestion: If swallowed, only induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician or poison control centre immediately.

5. Fire-fighting measures

Hazchem Code: 2X

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

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

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

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. Contaminated absorbent should be disposed of in accordance with local regulations. Clean surface thoroughly to remove residual contamination.

7. Handling and storage

Personal precautions: Avoid breathing 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. Keep away from incompatible substances (see Incompatibility section.)

8. Exposure controls/personal protection

Occupational exposure controls

Chemical Name	Regulatory List	Value Type	Value
Sulphur dioxide	Exposure Standards	time weighted average	2 ppm 5.2 mg/m3
		Short term exposure limit	5 ppm 13 mg/m3
Sulphur dioxide	WEL	time weighted average	2 ppm 5.2 mg/m3
		Short term exposure limit	5 ppm 13 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. 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.

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: colourless

Odour: odourless

Specific gravity: 1.21

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

Vapour density: 0.6

Volatile fraction by weight: 70 - 75 %

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

Water solubility: complete

pH: 6.0

Flash point: does not flash

Flammability Limits: Not specified

10. Stability and reactivity

Stability: Stable under normal conditions.

Incompatibility: Strong oxidizing agents, Strong bases, Acids, Metals Contact with strong acids may liberate sulphur dioxide. Contact with strong acids may liberate formaldehyde. Contact with strong bases may liberate formaldehyde.

Hazardous decomposition products: formaldehyde, Sulphur oxides.

Hazardous Polymerization: Hazardous polymerisation does not occur.

11. Toxicological information

Effects of Exposure

General advice:

Contains: Sodium formaldehyde bisulphite. Although this chemical is only slightly toxic inlaboratory animals, contact with acid in the stomach may result in release of formaldehyde which can cause irritation of the gastrointestinal tract.

Contains: Ethylenediaminetetraacetic acid. This compound can chelate metals and may alter calcium and other cation balances.

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

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

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

Ingestion: Expected to be a low ingestion hazard.

Data for Sodium formaldehyde bisulphite (CAS 870-72-4):

Acute Toxicity Data:
Oral LD50 (rat): > 3,200 mg/kg
- Skin irritation: slight
- Skin Sensitization (guinea pig): negative
- Eye irritation (washed eyes): slight
- Eye irritation (unwashed eyes): moderate

Data for Potassium sulphite (CAS 10117-38-1):

Acute Toxicity Data:
Oral LD50 (rat): > 3,200 mg/kg
- Dermal LD50 (guinea pig): > 20,000 mg/kg
- Skin irritation: slight to moderate

Data for Ethylenediaminetetraacetic acid (CAS 60-00-4):

Acute Toxicity Data:
Oral LD50 (rat): > 3,200 mg/kg
- Inhalation LCLo (rat): 1.48 MG/KG / 7 hr
- Dermal LD50 (guinea pig): > 1,000 mg/kg
- Skin irritation: slight
- Eye irritation: Irritating to eyes.

Data for 1-Thioglycerol (CAS 96-27-5):

Acute Toxicity Data:
Oral LD50 (rat): 400 - 800 mg/kg
- Skin irritation: strong
- Skin Sensitization (guinea pig): strong

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
Toxicity to algae (IC50):	> 100 mg/l
Toxicity to other organisms (EC50):	> 100 mg/l

Persistence and degradability: Readily biodegradable.

Chemical Oxygen Demand (COD): ca. 41.3 g/l

Biochemical Oxygen Demand (BOD): ca. 20.8 g/l

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

The information given below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions. Please consult the product packaging for further details.

ADG:	UN-Number:	UN3265
	Proper shipping name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Ethylenediaminetetraacetic acid)
	Class:	8
	Packaging group:	III
IATA:	UN-Number:	UN3265
	Proper shipping name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Ethylenediaminetetraacetic acid)
	Class:	8
	Packaging group:	III
IMDG:	UN-Number:	UN3265
	Proper shipping name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Ethylenediaminetetraacetic acid)
	Class:	8
	Packaging group:	III

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

15. Regulatory information

Notification status

Regulatory List	Notification status
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.

Poisons Schedule: Not specified

Australian Safety and Compensation Council: none

Other regulations

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.