

Material Safety Data Sheet

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

Product name: KODAK PROFESSIONAL, Single-Use Chemistry Kit, Process E-6, First Developer

Product code: 1077643 - First Developer

Supplier: EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York, 14650

For Emergency Health, Safety & Environmental Information, call (585) 722-5151 (USA)

For other information or to request an MSDS, call (800) 242-2424.

Synonyms: PCD 6250

Product Use: Professional colour film photographic processing solution, For industrial use only.

2. Hazards identification

CONTAINS: Potassium sulphite (10117-38-1), Potassium hydroquinone monosulphonate (21799-87-1), 4-hydroxymethyl-4-methyl-1-phenyl-3-pyrazolidinone (13047-13-7)

WARNING!

CAUSES EYE IRRITATION

PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE IRRITATION

MAY CAUSE ALLERGIC SKIN REACTION

MAY BE HARMFUL IF SWALLOWED.

HMIS III Hazard Ratings: Health - 2, Flammability - 0, Reactivity (Stability) - 0

NFPA Hazard Ratings: Health - 2, 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 %	Components - (CAS-No.)
10 - 15	Potassium sulphite (10117-38-1)
5 - 10	Potassium carbonate (584-08-7)
5 - 10	Potassium hydroquinone monosulphonate (21799-87-1)
1 - 5	Sodium carbonate (497-19-8)
1 - 5	Sodium bromide (7647-15-6)
0.1 - 1	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

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Inhalation: If inhaled, remove 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. Get medical attention.

Skin: 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

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 section).

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. Clean surface thoroughly to remove residual contamination.

7. Handling and storage

Personal precautions: Avoid prolonged or repeated breathing of mist or vapour. Use only with adequate ventilation. Avoid contact with eyes, skin, and clothing. 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	ACGIH	time weighted average	2 ppm
	ACGIH	Short term exposure limit	5 ppm
	OSHA Z1	Permissible exposure limit	5 ppm 13 mg/m3

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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: 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: clear light yellow

Odour: slight

Specific gravity: 1.27

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

Vapour density: 0.6

Volatile fraction by weight: 65 - 70 %

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

Water solubility: complete

pH: 9.9

Flash point: does not flash

10. Stability and reactivity

Stability: Stable under normal conditions.

Incompatibility: Acids. Contact with strong acids liberates sulphur dioxide.

Hazardous decomposition products: Carbon oxides, Sulphur oxides

Hazardous Polymerization: Hazardous polymerisation does not occur.

11. Toxicological information

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Effects of Exposure

General advice:

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: 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: Causes eye irritation.

Skin: May cause allergic skin reaction based on human experience. Prolonged or repeated contact may dry skin and cause irritation.

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

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

Acute Toxicity Data:

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

Data for Potassium carbonate (CAS 584-08-7):

Acute Toxicity Data:

- Oral LD50 (rat): 1,870 mg/kg
- Oral LD50 (rat): > 2,000 mg/kg

Data for Potassium hydroquinone monosulphonate (CAS 21799-87-1):

Acute Toxicity Data:

- Oral LD50 (male rat): > 3,200 mg/kg (10% in water)
- Oral LD50 (male mouse): > 3,200 mg/kg (10% in water)
- Dermal LD50 (guinea pig): > 1,000 mg/kg
- Skin irritation: slight to moderate (repeated skin application)
- Skin irritation: slight
- Skin Sensitization (guinea pig): negative
- Eye irritation: 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.

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Repeated dose toxicity:

- Feeding study (12-day, male rat): NOEL; 846 mg/kg/day (highest dose tested, target organ effects: none)
- Feeding study (90 days, male rat): NOEL; 627 mg/kg/day (target organ effects: none)
- Feeding study (90 days, female rat): NOEL; 713 mg/kg/day (target organ effects: none)

Data for Sodium carbonate (CAS 497-19-8):

Acute Toxicity Data:

- Oral LD50 (rat): 4,090 mg/kg
- Oral LD50 (rat): 1,600 - 3,200 mg/kg
- Inhalation LC50 (rat): 5,750 mg/l / 2 hr
- Skin irritation: slight
- Eye irritation: mild

Data for Sodium bromide (CAS 7647-15-6):

Acute Toxicity Data:

- Oral LD50 (rat): 3,500 mg/kg
- Oral LD50 (rat): 4,200 mg/kg
- Dermal LD50 (rabbit): > 2,000 mg/kg
- Eye irritation: slight

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

Acute Toxicity Data:

- Oral LD50 (rat): 566 mg/kg
- Oral LD50: 283 mg/kg
- Dermal LD50: > 1,000 mg/kg
- Skin irritation: slight
- Skin irritation: slight exacerbation (repeated skin application)
- Skin Sensitization: slight
- Eye irritation: strong irritation
- 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): LOEL (Lowest observable 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): LOEL (Lowest observable effect level); 40 mg/kg/day (target organ effects: blood, target organ effects: testes)

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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 Sensitization: none

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):	10 - 100 mg/l
Toxicity to algae (IC50):	10 - 100 mg/l
Toxicity to other organisms (EC50):	> 100 mg/l

Persistence and degradability: Readily biodegradable.

Chemical Oxygen Demand (COD): 120 g/l

Biochemical Oxygen Demand (BOD): 70 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

Not regulated for all modes of transportation.

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

15. Regulatory information

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Notification status

Regulatory List	Notification status
EINECS	y (positive listing)
TSCA	y (positive listing)
AICS	y (positive listing)
DSL	y (positive listing)
ENCS (JP)	y (positive listing)
KECI (KR)	y (positive listing)
PICCS (PH)	y (positive listing)
INV (CN)	y (positive listing)

A N (Negative listing) 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 California to cause cancer, birth, or any other reproductive defects.
US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323):	Water, Potassium sulphite, Potassium carbonate, Potassium hydroquinone monosulphonate
US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000):	No components are subject to the Massachusetts Right to Know Act.
US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5):	Water, Potassium sulphite, Potassium carbonate, Potassium hydroquinone monosulphonate, Sodium carbonate
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR	SARA 313: This material does not contain any chemical components with known

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372.65) - Supplier Notification Required:

CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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:

CONTAINS: Potassium sulphite (10117-38-1), Potassium hydroquinone monosulphonate (21799-87-1), 4-hydroxymethyl-4-methyl-1-phenyl-3-pyrazolidinone (13047-13-7)

WARNING!

CAUSES EYE IRRITATION

PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE IRRITATION

MAY CAUSE ALLERGIC SKIN REACTION

MAY BE HARMFUL IF SWALLOWED.

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.

FIRST AID: If inhaled, remove to fresh air. Get medical attention if symptoms occur. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. 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. 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.

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, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

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The Kodak logo is displayed in a bold, red, sans-serif font.

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

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

Product name: KODAK PROFESSIONAL, Single-Use Chemistry Kit, Process E-6, Color Developer - Part A

Product code: 1077643 - Color Developer - Part A

Supplier: EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York, 14650

For Emergency Health, Safety & Environmental Information, call (585) 722-5151 (USA)

For other information or to request an MSDS, call (800) 242-2424.

Synonyms: PCD 6268

Product Use: Professional colour film photographic processing solution, For industrial use only.

2. Hazards identification

CONTAINS: Tripotassium phosphate (7778-53-2), Sodium sulphite (7757-83-7), Potassium hydroxide (1310-58-3), Aminotris(methylphosphonic acid) (6419-19-8)

DANGER!

CAUSES EYE BURNS

HARMFUL IF SWALLOWED

DUST, MIST OR VAPOUR IRRITATING TO THE EYES AND RESPIRATORY TRACT

HMIS III Hazard Ratings: Health - 3, Flammability - 0, Reactivity (Stability) - 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 %	Components - (CAS-No.)
10 - 15	Tripotassium phosphate (7778-53-2)
1 - 5	Sodium sulphite (7757-83-7)
1 - 5	Aminotris(methylphosphonic acid) (6419-19-8)
1 - 2	Potassium hydroxide (1310-58-3)

4. First aid measures

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration using mouth guards or shields, when available, to avoid mouth-to-mouth contact. If breathing is difficult, give oxygen. Get medical attention.

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Eyes: Immediately flush the contaminated eye(s) with water for at least 60 minutes, while holding the eyelid(s) open. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Neutral saline solution may be used as soon as it is available. DO NOT INTERRUPT FLUSHING. Contact a physician or poison control center immediately. Continue flushing the eye(s) until the physician advises to stop. If necessary, continue flushing during transport to an emergency care facility.

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

Notes to physician:

Treatment: Strong alkalis bind tissue protein. Following initial flushing of the eye with water, continued irrigation of the eye with saline is recommended.

5. Fire-fighting measures

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 section).

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. Clean contaminated surface thoroughly.

7. Handling and storage

Personal precautions: Do not breathe vapours or spray mist. Use only with adequate ventilation. Keep container closed. Do not get in eyes and avoid contact with skin and clothing. 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

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Occupational exposure controls

Chemical Name	Regulatory List	Value Type	Value
Potassium hydroxide	ACGIH	Ceiling Limit Value:	2 mg/m3
Sulphur dioxide	ACGIH	time weighted average	2 ppm
	ACGIH	Short term exposure limit	5 ppm
	OSHA Z1	Permissible exposure limit	5 ppm 13 mg/m3

Ventilation: Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Controls should be sufficient so that applicable occupational exposure limits are not exceeded.

Respiratory protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. 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) 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: odourless

Specific gravity: 1.22

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

Vapour density: 0.6

Volatile fraction by weight: 80 - 85 %

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

Water solubility: completely soluble

pH: 13.8

Flash point: does not flash

10. Stability and reactivity

Stability: Stable under normal conditions.

Incompatibility: Acids. Contact with strong acids may liberate sulphur dioxide.

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Hazardous decomposition products: Oxides of phosphorus, Sulphur oxides

Hazardous Polymerization: Hazardous polymerisation does not occur.

11. Toxicological information

Effects of Exposure

Inhalation: Airborne dust/mist/vapor irritating. Some asthmatics or hypersensitive individuals may experience difficulty breathing if exposed to aerosols or decomposition products that are not anticipated during normal use.

Eyes: Causes eye burns. Airborne dust/mist/vapor irritating.

Skin: Prolonged or repeated skin contact may cause irritation. This material has a low potential to cause allergic skin reactions; however, cases of human skin sensitization have been reported.

Ingestion: Harmful if swallowed. May cause burns of the gastrointestinal tract if swallowed. Some asthmatics or sulfite-sensitive individuals may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness and diarrhea.

Data for PCD 6439 (a very similar material):

Acute Toxicity Data:

- Skin irritation: negative (4-hour DOT Skin Corrosivity Test)

Data for Tripotassium phosphate (CAS 7778-53-2):

Acute Toxicity Data:

- Oral LD50 (rat): 1,600 - 3,200 mg/kg (10% in water)
- Oral LD50 (rat): > 3,200 mg/kg
- Oral LD50 (mouse): 1,600 - 3,200 mg/kg (10% in water)
- Dermal LD50: > 4,640 mg/kg
- Dermal LD50 (guinea pig): > 1,000 mg/kg
- Dermal LD50 (guinea pig): 20 cc/kg
- Skin irritation: moderate
- Eye irritation: severe

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

Acute Toxicity Data:

- Oral LD50 (rat): > 1,600 mg/kg
- Oral LD50 (rat): 2,610 mg/kg
- Inhalation LC50 (rat): > 5.5 mg/l / 4 hr
- Skin irritation: none
- Skin irritation: none
- Eye irritation: slight; washing palliative

Data for Potassium hydroxide (CAS 1310-58-3):

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Acute Toxicity Data:

- Oral LD50 (rat): 273 mg/kg
- Skin irritation: severe

Data for Aminotris(methylphosphonic acid) (CAS 6419-19-8):

Acute Toxicity Data:

- Oral LD50 (rat): 2,901 mg/kg (data supplied by vendor)
- Dermal LD50: > 6,310 mg/kg (data supplied by vendor)
- Skin irritation: moderate (data supplied by vendor)
- Eye irritation (data supplied by vendor): moderate

12. Ecological information

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

Potential Toxicity:

Toxicity to fish:	> 100 mg/l
Toxicity to daphnia:	> 100 mg/l
Toxicity to algae:	> 100 mg/l
Toxicity to other organisms:	> 100 mg/l

Persistence and degradability: Readily biodegradable.

Chemical Oxygen Demand (COD): 15 g/l

Biochemical Oxygen Demand (BOD): 5 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.

IATA:	UN Number:	UN1814
	Proper shipping name:	Potassium hydroxide solution
	Class:	8
	Packaging group:	III

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IMDG: UN Number: UN1814
Proper shipping name: POTASSIUM HYDROXIDE SOLUTION
Class: 8
Packaging group: III

US DOT: UN Number: UN1814
Proper shipping name: Potassium hydroxide, solution
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
EINECS	y (positive listing)
TSCA	y (positive listing)
AICS	y (positive listing)
DSL	y (positive listing)
ENCS (JP)	y (positive listing)
KECI (KR)	y (positive listing)
PICCS (PH)	y (positive listing)
INV (CN)	y (positive listing)

A N (Negative listing) 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

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	chemicals known to State of California to cause cancer, birth, or any other reproductive defects.
US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323):	Water, Tripotassium phosphate
US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000):	No components are subject to the Massachusetts Right to Know Act.
US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5):	Water, Tripotassium phosphate, Sodium sulphite, Potassium hydroxide, Aminotris(methylphosphonic acid)
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:	SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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:

CONTAINS: Tripotassium phosphate (7778-53-2), Sodium sulphite (7757-83-7), Potassium hydroxide (1310-58-3), Aminotris(methylphosphonic acid) (6419-19-8)

DANGER!

CAUSES EYE BURNS

HARMFUL IF SWALLOWED

DUST, MIST OR VAPOUR IRRITATING TO THE EYES AND RESPIRATORY TRACT

Do not breathe vapours or spray mist.

Use only with adequate ventilation.

Keep container closed.

Do not get in eyes and avoid contact with skin and clothing.

Wash thoroughly after handling.

FIRST AID: If inhaled, remove to fresh air. If not breathing, give artificial respiration using mouth guards or shields, when available, to avoid mouth-to-mouth contact. If breathing is difficult, give oxygen. Get medical attention. Immediately flush the contaminated eye(s) with water for at least 60 minutes, while holding the eyelid(s) open. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Neutral saline solution may be used as soon as it is available. DO NOT INTERRUPT FLUSHING. Contact a physician or poison control center immediately. Continue flushing the eye(s) until the physician advises to stop. If necessary, continue flushing during

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

Notes to physician: Strong alkalis bind tissue protein. Following initial flushing of the eye with water, continued irrigation of the eye with saline is recommended.

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, then place in a container for chemical waste. Clean contaminated surface thoroughly.

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

Product name: KODAK PROFESSIONAL, Single-Use Chemistry Kit, Process E-6, Color Developer - Part B

Product code: 1077643 - Color Developer - Part B

Supplier: EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York, 14650

For Emergency Health, Safety & Environmental Information, call (585) 722-5151 (USA)

For other information or to request an MSDS, call (800) 242-2424.

Synonyms: PCD 6246

Product Use: Professional colour film photographic processing solution, For industrial use only.

2. Hazards identification

CONTAINS: 4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine sesquisulphate monohydrate (25646-71-3), Sodium bisulphite (7631-90-5)

WARNING!

HARMFUL IF SWALLOWED

MAY CAUSE KIDNEY DAMAGE BASED ON ANIMAL DATA

MAY BE HARMFUL IF INHALED

MAY LIBERATE SULFUR DIOXIDE

DUST, MIST OR VAPOUR IRRITATING TO THE EYES AND RESPIRATORY TRACT

CAUSES SKIN AND EYE IRRITATION

MAY CAUSE ALLERGIC SKIN REACTION

HMIS III Hazard Ratings: Health - 2*, Flammability - 1, Reactivity (Stability) - 0

NFPA Hazard Ratings: Health - 2, 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 %	Components - (CAS-No.)
15 - 20	4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine sesquisulphate monohydrate (25646-71-3)
0.1 - < 1	Sodium bisulphite (7631-90-5)

4. First aid measures

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Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration using mouth guards or shields, when available, to avoid mouth-to-mouth contact. If breathing is difficult, give oxygen. Get medical attention.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin: In case of contact, immediately flush eyes or 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

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

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

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. Clean surface thoroughly to remove residual contamination.

7. Handling and storage

Personal precautions: Do not breathe vapours or spray mist. Use only with adequate ventilation. Keep container tightly closed. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

Prevention of Fire and Explosion: Keep from contact with oxidizing materials.

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
4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine sesquisulphate monohydrate	EK HPG	Time Weighted Average (TWA):	1.0 mg/m ³

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Sulphur dioxide	ACGIH	time weighted average	2 ppm
	ACGIH	Short term exposure limit	5 ppm
	OSHA Z1	Permissible exposure limit	5 ppm 13 mg/m ³

Ventilation: Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Controls should be sufficient so that applicable occupational exposure limits are not exceeded.

Respiratory protection: 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.

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: light amber

Odour: sulphur dioxide

Specific gravity: 1.067

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

Vapour density: 0.6

Volatile fraction by weight: 80 - 85 %

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

Water solubility: completely soluble

pH: < 2

Flash point: does not flash

10. Stability and reactivity

Stability: Stable under normal conditions.

Incompatibility: Strong oxidizing agents, Bases.

Hazardous decomposition products: nitrogen oxides (NO_x), Sulphur oxides

Hazardous Polymerization: Hazardous polymerisation does not occur.

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11. Toxicological information

Effects of Exposure

General advice:

Contains: 4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine sesquisulphate monohydrate. May cause kidney damage based on animal data.

Inhalation: May be harmful if inhaled. Airborne dust/mist/vapor irritating. Liberates sulphur dioxide gas which can cause irritation to the respiratory tract. Some asthmatics or hypersensitive individuals may experience difficulty breathing.

Eyes: Causes eye irritation. Airborne dust/mist/vapor irritating.

Skin: Causes skin irritation. May cause allergic skin reaction based on human experience.

Ingestion: Harmful if swallowed. May cause irritation of the gastrointestinal tract. Some asthmatics or sulfite-sensitive individuals may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness and diarrhea.

Data for 4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine sesquisulphate monohydrate (CAS 25646-71-3):

Acute Toxicity Data:

- Oral LD50 (male rat): 400 mg/kg (target organ effects: kidney)
- Oral LD50 (female rat): 246 mg/kg
- Dermal LD50: > 1,000 mg/kg (highest dose tested)
- Skin irritation: moderate (repeated skin application)
- Skin Sensitization (guinea pig): moderate
- Skin Sensitization (human): positive
- Eye irritation (unwashed eyes): moderate
- Eye irritation (washed eyes): slight

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.

Carcinogenicity:

- Oral study (hamster, 2 years): NOEL; 0.04 % in diet (highest dose tested)

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

Acute Toxicity Data:

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

12. Ecological information

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

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Potential Toxicity:

Toxicity to fish:	10 - 100 mg/l
Toxicity to daphnia:	10 - 100 mg/l
Toxicity to algae:	10 - 100 mg/l
Toxicity to other organisms:	> 100 mg/l

Persistence and degradability: Readily biodegradable.

Chemical Oxygen Demand (COD): 160 g/l

Biochemical Oxygen Demand (BOD): 20 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.

IATA: UN Number: UN3265
Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine sesquisulphate monohydrate)
Class: 8
Packaging group: III

IMDG: UN Number: UN3265
Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine sesquisulphate monohydrate)
Class: 8
Packaging group: III

US DOT: UN Number: UN3265
Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine sesquisulphate monohydrate)
Class: 8
Packaging group: III

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

15. Regulatory information

Notification status

Regulatory List	Notification status
EINECS	y (positive listing)
TSCA	y (positive listing)
AICS	y (positive listing)
DSL	y (positive listing)
ENCS (JP)	y (positive listing)
KECI (KR)	y (positive listing)
PICCS (PH)	y (positive listing)
INV (CN)	y (positive listing)

A N (Negative listing) 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 California to cause cancer, birth, or any other reproductive defects.
US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323):	Water, 4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine sesquisulphate monohydrate
US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000):	No components are subject to the Massachusetts Right to Know Act.

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US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5):	Water, 4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine sesquisulphate monohydrate
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:	SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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:

CONTAINS: 4-(N-ethyl-N-2-methanesulphonylaminoethyl)-2-methylphenylenediamine sesquisulphate monohydrate (25646-71-3), Sodium bisulphite (7631-90-5)

WARNING!

HARMFUL IF SWALLOWED

MAY CAUSE KIDNEY DAMAGE BASED ON ANIMAL DATA

MAY BE HARMFUL IF INHALED

MAY LIBERATE SULFUR DIOXIDE

DUST, MIST OR VAPOUR IRRITATING TO THE EYES AND RESPIRATORY TRACT

CAUSES SKIN AND EYE IRRITATION

MAY CAUSE ALLERGIC SKIN REACTION

Do not breathe vapours or spray mist.

Use only with adequate ventilation.

Keep container tightly closed.

Avoid contact with eyes, skin, and clothing.

Wash thoroughly after handling.

FIRST AID: If inhaled, remove to fresh air. If not breathing, give artificial respiration using mouth guards or shields, when available, to avoid mouth-to-mouth contact. If breathing is difficult, give oxygen. Get medical attention. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. In case of contact, immediately flush eyes or 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. 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.

Keep out of reach of children.

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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.

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.

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-2, S-3, F-1, C-0

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

Product name: KODAK PROFESSIONAL, Single-Use Chemistry Kit, Process E-6, Reversal Bath

Product code: 1077643 - Reversal Bath

Supplier: EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York, 14650

For Emergency Health, Safety & Environmental Information, call (585) 722-5151 (USA)

For other information or to request an MSDS, call (800) 242-2424.

Synonyms: PCD 6357

Product Use: Professional colour film photographic processing solution, For industrial use only.

2. Hazards identification

CONTAINS: Acetic acid (64-19-7), Stannous chloride (7772-99-8)

WARNING!

CAUSES EYE IRRITATION

PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE IRRITATION

HMIS III Hazard Ratings: Health - 2, Flammability - 1, Reactivity (Stability) - 0

NFPA Hazard Ratings: Health - 1, 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 %	Components - (CAS-No.)
1 - 5	Stannous chloride (7772-99-8)
1 - 5	Acetic acid (64-19-7)

4. First aid measures

Inhalation: If inhaled, remove 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. Get medical attention.

Skin: 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.

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Ingestion: If swallowed, get medical attention if symptoms occur.

5. Fire-fighting measures

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

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), (see also Hazardous Decomposition Products section).

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. Clean contaminated surface thoroughly.

7. Handling and storage

Personal precautions: Avoid prolonged or repeated breathing of mist or vapour. Use only with adequate ventilation. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

Prevention of Fire and Explosion: Keep from contact with oxidizing materials.

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
Acetic acid	ACGIH	time weighted average	10 ppm
	ACGIH	Short term exposure limit	15 ppm
	OSHA Z1	time weighted average	10 ppm 25 mg/m3
	OSHA Z1A	time weighted average	10 ppm 25 mg/m3
Stannous chloride	ACGIH	time weighted average	2 mg/m3
	OSHA Z1	Permissible exposure limit <i>Expressed as Sn</i>	2 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

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type: full-face organic vapour cartridge. 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: clear

Odour: slight acetic acid

Specific gravity: 1.166

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

Vapour density: 0.6

Volatile fraction by weight: 70 - 80 %

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

Water solubility: complete

pH: 5.3

Flash point: does not flash

10. Stability and reactivity

Stability: Stable under normal conditions.

Incompatibility: Strong oxidizing agents.

Hazardous decomposition products: Oxides of phosphorus

Hazardous Polymerization: Hazardous polymerisation does not occur.

11. Toxicological information

Effects of Exposure

General advice:

Contains: Stannous chloride. Chronic inhalation of tin dust or fumes can cause benign pneumoconiosis.

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

Eyes: Causes eye irritation.

Skin: Prolonged or repeated skin contact may cause irritation.

Ingestion: Expected to be a low ingestion hazard. May cause irritation of the gastrointestinal tract.

Data for Acetic acid (CAS 64-19-7):

Acute Toxicity Data:

- Oral LD50 (rat): 3,310 - 3,530 mg/kg
- Inhalation LC50: 5620 ppm / 1.00 hr
- Inhalation LC50 (rat): > 16000 ppm / 4 hr
- Dermal LD50: 1,060 mg/kg
- Dermal LD50 (rabbit): 1,060 mg/kg
- Skin irritation: severe
- Eye irritation (washed eyes): severe
- Eye irritation (unwashed eyes): severe

12. Ecological information

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

Potential Toxicity:

Toxicity to fish:	> 100 mg/l
Toxicity to daphnia:	10 - 100 mg/l
Toxicity to algae:	no data available
Toxicity to other organisms:	10 - 100 mg/l

Persistence and degradability: Readily biodegradable.

Chemical Oxygen Demand (COD): 108 g/l

Biochemical Oxygen Demand (BOD): 71 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

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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.

IATA:	UN Number:	UN3265
	Proper shipping name:	Corrosive liquid, acidic, organic, n.o.s. (Acetic acid)
	Class:	8
	Packaging group:	III
IMDG:	UN Number:	UN3265
	Proper shipping name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Acetic acid)
	Class:	8
	Packaging group:	III
US DOT:	UN Number:	UN3265
	Proper shipping name:	Corrosive liquid, acidic, organic, n.o.s. (Acetic 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
EINECS	y (positive listing)
TSCA	y (positive listing)
AICS	y (positive listing)
DSL	y (positive listing)
ENCS (JP)	y (positive listing)
KECI (KR)	y (positive listing)
PICCS (PH)	n (Negative listing)
INV (CN)	y (positive listing)

A N (Negative listing) 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.

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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 California to cause cancer, birth, or any other reproductive defects.
US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323):	Water, Sodium acetate, Substituted phosphonate, Acetic acid, Stannous chloride
US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000):	Acetic acid
US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5):	Water, Sodium acetate, Substituted phosphonate, Acetic acid, Stannous chloride
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:	SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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:

CONTAINS: Acetic acid (64-19-7), Stannous chloride (7772-99-8)

WARNING!

CAUSES EYE IRRITATION

PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE IRRITATION

Avoid prolonged or repeated breathing of mist or vapour.

Use only with adequate ventilation.

Avoid contact with eyes, skin, and clothing.

Wash thoroughly after handling.

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FIRST AID: If inhaled, remove to fresh air. Get medical attention if symptoms occur. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. 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. If swallowed, get medical attention if symptoms occur.

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.

IN CASE OF SPILL: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean contaminated surface thoroughly.

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

Product name: KODAK PROFESSIONAL, Single-Use Chemistry Kit, Process E-6, Pre-Bleach

Product code: 1077643 - Pre-Bleach

Supplier: EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York, 14650

For Emergency Health, Safety & Environmental Information, call (585) 722-5151 (USA)

For other information or to request an MSDS, call (800) 242-2424.

Synonyms: PCD 6581

Product Use: Professional colour paper photographic processing solution, For industrial use only.

2. Hazards identification

CONTAINS: Sodium formaldehyde bisulphite (870-72-4), Potassium sulphite (10117-38-1), 1-Thioglycerol (96-27-5)

WARNING!

MAY BE HARMFUL IF SWALLOWED.

MAY CAUSE ALLERGIC SKIN REACTION

HMIS III Hazard Ratings: Health - 2, Flammability - 1, Reactivity (Stability) - 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 %	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.

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

5. Fire-fighting measures

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

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, Sulphur oxides, (see also Hazardous Decomposition Products section).

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. Clean surface thoroughly to remove residual contamination.

7. Handling and storage

Personal precautions: Avoid prolonged or repeated breathing of mist or vapour. Use only with adequate ventilation. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

Prevention of Fire and Explosion: Keep from contact with oxidizing materials.

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	ACGIH	time weighted average	2 ppm
	ACGIH	Short term exposure limit	5 ppm
	OSHA Z1	Permissible 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. Respirator

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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: 1.216

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

Vapour density: 0.6

Volatile fraction by weight: 65 - 70 %

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

Water solubility: complete

pH: 6.0

Flash point: > 93.33 °C (> 200.0 °F) estimated

10. Stability and reactivity

Stability: Stable under normal conditions.

Incompatibility: Strong oxidizing agents, Strong acids, Strong bases. Contact with strong acids liberates sulphur dioxide.

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 in laboratory animals, contact with acid in the stomach may result in release of formaldehyde

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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. Some asthmatics or hypersensitive individuals may experience difficulty breathing if exposed to aerosols or decomposition products that are not anticipated during normal use.

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

Skin: May cause allergic skin reaction. Prolonged or repeated skin contact may cause irritation.

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

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

Acute Toxicity Data:

- Oral LD50 (mouse): 3,200 - 6,400 mg/kg
- Oral LD50: 3,200 - 6,400 mg/kg
- Oral LD50 (rat): > 3,200 mg/kg
- Oral LD50 (mouse): > 3,200 mg/kg
- Skin irritation: slight
- Skin Sensitization (guinea pig): none
- Skin Sensitization (guinea pig): negative
- Eye irritation (washed eyes): slight
- Eye irritation (unwashed eyes): moderate

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

Acute Toxicity Data:

- Oral LD50 (rat): > 3,200 mg/kg
- Oral LD50: 1,600 - 3,200 mg/kg
- Oral LD50 (female rat): 1,210 - 1,780 mg/kg
- Oral LD50 (male rat): 1,913 - 2,150 mg/kg
- Oral LD50 (mouse): 20.5 - 30.0 mg/kg
- Inhalation LC50 (rat): 0.14 - 0.62 mg/l 29 - 132 ppm / 6 hrs
- Inhalation LCLo (rat): 1.48 MG/KG / 7 hr
- Dermal LD50 (guinea pig): > 1,000 mg/kg
- Skin irritation: slight

Mutagenicity/Genotoxicity Data:

- Cell transformation assay (BALB/3T3 mouse cells):

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

Acute Toxicity Data:

- Oral LD50 (rat): > 3,200 mg/kg
- Oral LD50 (mouse): > 3,200 mg/kg

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- Dermal LD50 (guinea pig): > 20,000 mg/kg
- Skin irritation: slight to moderate

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: > 100 mg/l

Toxicity to daphnia: > 100 mg/l

Toxicity to algae: > 100 mg/l

Toxicity to other organisms: > 100 mg/l

Persistence and degradability: Not readily biodegradable.

Chemical Oxygen Demand (COD): 109 g/l

Biochemical Oxygen Demand (BOD): 17 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

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
EINECS	y (positive listing)

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TSCA	y (positive listing)
AICS	y (positive listing)
DSL	y (positive listing)
ENCS (JP)	y (positive listing)
KECI (KR)	y (positive listing)
PICCS (PH)	y (positive listing)
INV (CN)	y (positive listing)

A N (Negative listing) 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 California to cause cancer, birth, or any other reproductive defects.
US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323):	Water, Sodium formaldehyde bisulphite, Potassium sulphite, Ethylenediaminetetraacetic acid
US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000):	Ethylenediaminetetraacetic acid
US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5):	Water, Sodium formaldehyde bisulphite, Potassium sulphite, Ethylenediaminetetraacetic acid
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:	SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
US. EPA Emergency Planning and Community Right-To-Know Act	SARA 302: No chemicals in this material

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(EPCRA) SARA Title III Section 302 Extremely Hazardous
Substance (40 CFR 355, Appendix A):

are subject to the reporting
requirements of SARA Title III, Section
302.

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:

CONTAINS: Sodium formaldehyde bisulphite (870-72-4), Potassium sulphite (10117-38-1), 1-Thioglycerol (96-27-5)

WARNING!
MAY BE HARMFUL IF SWALLOWED.
MAY CAUSE ALLERGIC SKIN REACTION

Avoid prolonged or repeated breathing of mist or vapour.
Use only with adequate ventilation.
Avoid contact with eyes, skin, and clothing.
Wash thoroughly after handling.

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. Get medical attention if symptoms occur. 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. 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 water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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.

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

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

Product name: KODAK PROFESSIONAL, Single-Use Chemistry Kit, Process E-6, Bleach

Product code: 1077643 - Bleach

Supplier: EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York, 14650

For Emergency Health, Safety & Environmental Information, call (585) 722-5151 (USA)

For other information or to request an MSDS, call (800) 242-2424.

Synonyms: PCD 6307

Product Use: Professional colour film photographic processing solution, For industrial use only.

2. Hazards identification

CONTAINS: Ammonium bromide (12124-97-9), Hydrobromic acid (10035-10-6), Potassium nitrate (7757-79-1)

WARNING!

CAUSES SKIN AND EYE IRRITATION

DUST, MIST OR VAPOUR IRRITATING TO THE EYES AND RESPIRATORY TRACT

MAY BE HARMFUL IF SWALLOWED.

CONTAINS AN OXIDIZING MATERIAL.

HMIS III Hazard Ratings: Health - 2, Flammability - 1, Reactivity (Stability) - 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 %	Components - (CAS-No.)
20 - 25	Ammonium ferric ethylenediaminetetraacetic acid (21265-50-9)
10 - 15	Ammonium bromide (12124-97-9)
1 - 5	Potassium nitrate (7757-79-1)
1 - 5	Hydrobromic acid (10035-10-6)
1 - 5	Ethylenediaminetetraacetic acid (60-00-4)

4. First aid measures

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Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration using mouth guards or shields, when available, to avoid mouth-to-mouth contact. If breathing is difficult, give oxygen. Get medical attention.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin: 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

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

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), (see also Hazardous Decomposition Products section).

Unusual Fire and Explosion Hazards: Mixture contains an oxidizing material and may increase the burning rate of combustible materials. Dried product residue can act as an oxidizer.

6. Accidental release measures

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

7. Handling and storage

Personal precautions: Do not breathe vapours or spray mist. Use only with adequate ventilation. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

Prevention of Fire and Explosion: Keep from contact with oxidizing materials. Keep away from combustible material. Remove and wash contaminated clothing promptly.

Storage: 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
Hydrobromic acid	ACGIH OSHA Z1	Ceiling Limit Value: time weighted average	2 ppm 3 ppm 10 mg/m3

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OSHA Z1A

Ceiling Limit Value:

3 ppm 10 mg/m3

Ventilation: Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Controls should be sufficient so that applicable occupational exposure limits are not exceeded.

Respiratory protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. Respirator type: full-face positive-pressure air-supplied. 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: clear yellow

Odour: odourless

Specific gravity: 1.289

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

Vapour density: 0.6

Volatile fraction by weight: 50 - 55 %

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

Water solubility: complete

pH: 5.6

Flash point: no data available

10. Stability and reactivity

Stability: Stable under normal conditions.

Incompatibility: Strong oxidizing agents, Bases, sodium hypochlorite (bleach), Combustible material, strong reducing agents. Contact with sodium hypochlorite (bleach) may form chloramine (toxic gas).

Hazardous decomposition products: Ammonia, chloramine, nitrogen oxides (NOx), hydrogen bromide

Hazardous Polymerization: Hazardous polymerisation does not occur.

11. Toxicological information

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Effects of Exposure

General advice:

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

Contains: Potassium nitrate. Under some circumstances methemoglobinemia may occur when nitrates are converted by bacteria in the stomach to nitrites.

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

Inhalation: Airborne dust/mist/vapor irritating.

Eyes: Causes eye irritation. Airborne dust/mist/vapor irritating.

Skin: Causes skin irritation.

Ingestion: May be harmful if swallowed.

Data for Ammonium bromide (CAS 12124-97-9):

Acute Toxicity Data:

- Oral LD50 (rat): 2,700 mg/kg
- Oral LD50 (rat): 2,714 mg/kg
- Dermal LD50 (rat): > 2,000 mg/kg
- Skin irritation: irritating

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

Acute Toxicity Data:

- Oral LD50 (rat): > 3,200 mg/kg
- Oral LD50: 1,600 - 3,200 mg/kg
- Oral LD50 (female rat): 1,210 - 1,780 mg/kg
- Oral LD50 (male rat): 1,913 - 2,150 mg/kg
- Oral LD50 (mouse): 20.5 - 30.0 mg/kg
- Inhalation LC50 (rat): 0.14 - 0.62 mg/l 29 - 132 ppm / 6 hrs
- Inhalation LCLo (rat): 1.48 MG/KG / 7 hr
- Dermal LD50 (guinea pig): > 1,000 mg/kg
- Skin irritation: slight

Mutagenicity/Genotoxicity Data:

- Cell transformation assay (BALB/3T3 mouse cells):

Data for Potassium nitrate (CAS 7757-79-1):

Acute Toxicity Data:

- Oral LD50 (rat): 1,600 - 3,200 mg/kg

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- Oral LD50 (rat): 1,600 - 3,200 mg/kg (10% in water)
- Oral LD50 (mouse): 1,600 - 3,200 mg/kg (10% in water)
- Dermal LD50 (guinea pig): 1,000 mg/kg
- Skin irritation: slight

12. Ecological information

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

Potential Toxicity:

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

Persistence and degradability: Not readily biodegradable.

Chemical Oxygen Demand (COD): 114 g/l

Biochemical Oxygen Demand (BOD): 3 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.

IATA: UN Number: UN1788
Proper shipping name: Hydrobromic acid Solution
Class: 8
Packaging group: III

IMDG: UN Number: UN1788
Proper shipping name: HYDROBROMIC ACID Solution
Class: 8
Packaging group: III

US DOT: UN Number: UN1788
Proper shipping name: Hydrobromic acid Solution
Class: 8
Packaging group: III

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

15. Regulatory information

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Notification status

Regulatory List	Notification status
EINECS	y (positive listing)
TSCA	y (positive listing)
AICS	y (positive listing)
DSL	y (positive listing)
ENCS (JP)	n (Negative listing)
KECI (KR)	y (positive listing)
PICCS (PH)	y (positive listing)
INV (CN)	y (positive listing)

A N (Negative listing) 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 California to cause cancer, birth, or any other reproductive defects.
US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323):	Water, Ammonium ferric ethylenediaminetetraacetic acid, Ammonium bromide, Potassium nitrate, Hydrobromic acid, Ethylenediaminetetraacetic acid
US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000):	Ammonium bromide, Hydrobromic acid, Ethylenediaminetetraacetic acid
US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5):	Water, Ammonium ferric ethylenediaminetetraacetic acid,

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Ammonium bromide, Potassium nitrate, Hydrobromic acid, Ethylenediaminetetraacetic acid

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:

Ammonium bromide, Potassium nitrate

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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:

CONTAINS: Ammonium bromide (12124-97-9), Hydrobromic acid (10035-10-6), Potassium nitrate (7757-79-1)

WARNING!

CAUSES SKIN AND EYE IRRITATION

DUST, MIST OR VAPOUR IRRITATING TO THE EYES AND RESPIRATORY TRACT

MAY BE HARMFUL IF SWALLOWED.

CONTAINS AN OXIDIZING MATERIAL.

Do not breathe mist or vapour at concentrations greater than the exposure limits.

Use only with adequate ventilation.

Avoid contact with eyes, skin, and clothing.

Keep container tightly closed to prevent the loss of water.

Keep away from combustible material.

Keep from contact with clothing and other combustible materials. Remove and wash contaminated clothing promptly.

Wash thoroughly after handling.

FIRST AID: If inhaled, remove to fresh air. If not breathing, give artificial respiration using mouth guards or shields, when available, to avoid mouth-to-mouth contact. If breathing is difficult, give oxygen. Get medical attention. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. 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. 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.

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.

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The Kodak logo is displayed in a bold, red, sans-serif font.

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.

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.

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

Product name: KODAK PROFESSIONAL, Single-Use Chemistry Kit, Process E-6, Fixer

Product code: 1077643 - Fixer

Supplier: EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York, 14650

For Emergency Health, Safety & Environmental Information, call (585) 722-5151 (USA)

For other information or to request an MSDS, call (800) 242-2424.

Synonyms: PCD 4510

Product Use: photographic processing chemical, For industrial use only.

2. Hazards identification

CONTAINS: Ammonium thiosulphate (7783-18-8), Sodium bisulphite (7631-90-5), Ammonium sulphite (10196-04-0), Sodium sulphite (7757-83-7)

WARNING!

MAY BE HARMFUL IF SWALLOWED.

CAUSES EYE IRRITATION

DRIED PRODUCT RESIDUE CAN ACT AS A REDUCING AGENT.

HMIS III Hazard Ratings: Health - 2, Flammability - 1, Reactivity (Stability) - 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 %	Components - (CAS-No.)
50 - 55	Ammonium thiosulphate (7783-18-8)
1 - 5	Sodium bisulphite (7631-90-5)
1 - 5	Ammonium sulphite (10196-04-0)
1 - 5	Sodium sulphite (7757-83-7)

4. First aid measures

Inhalation: If inhaled, remove 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. Get medical attention.

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

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

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: nitrogen oxides (NO_x), Sulphur oxides, (see also Hazardous Decomposition Products section).

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. Clean surface thoroughly to remove residual contamination.

For Large Spills: 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.

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	ACGIH	time weighted average	5 mg/m ³
Sulphur dioxide	ACGIH	time weighted average	2 ppm
	ACGIH	Short term exposure limit	5 ppm
	OSHA Z1	Permissible exposure limit	5 ppm 13 mg/m ³

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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 under normal conditions of use. If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. 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: For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.

9. Physical and chemical properties

Physical form: liquid

Colour: colourless

Odour: odourless

Specific gravity: 1.37

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

Vapour density: 0.6

Volatile fraction by weight: no data available

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

Water solubility: complete

pH: 6.2

Flash point: does not flash

10. Stability and reactivity

Stability: Stable under normal conditions.

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

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

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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: Causes 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: May be 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
- Oral LD50 (rat): 2,890 mg/kg
- Oral LD50 (mouse): 2,100 mg/kg
- Oral LD50 (guinea pig): 1,098 mg/kg
- Eye irritation: none

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
- Oral LD50: 1,904 mg/kg
- Oral LD50 (rat): 2,500 mg/kg (10% in water)
- Oral LD50 (mouse): 1,900 mg/kg (10% in water)
- Inhalation LC50 (rat): > 2.46 mg/l / 6 hr
- Dermal LD50: > 1,000 mg/kg
- Dermal LD50 (guinea pig): >1.0 g/kg
- Skin irritation: slight

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

Acute Toxicity Data:

- Oral LD50 (rat): > 1,600 mg/kg
- Oral LD50 (rat): 2,610 mg/kg

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- Inhalation LC50 (rat): > 5.5 mg/l / 4 hr
- Skin irritation: none
- Skin irritation: none
- Eye irritation: slight; washing palliative

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: Not readily biodegradable.

Chemical Oxygen Demand (COD): 327 g/l

Biochemical Oxygen Demand (BOD): 266 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

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
EINECS	y (positive listing)
TSCA	y (positive listing)
AICS	y (positive listing)
DSL	y (positive listing)
ENCS (JP)	n (Negative listing)

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KECI (KR) y (positive listing)
PICCS (PH) y (positive listing)
INV (CN) y (positive listing)

A N (Negative listing) 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 California to cause cancer, birth, or any other reproductive defects.
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:	Ammonium thiosulphate, Ammonium sulphite
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323):	Ammonium thiosulphate, Water, Sodium bisulphite, Ammonium sulphite
US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000):	Ammonium thiosulphate, Ammonium sulphite
US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5):	Ammonium thiosulphate, Water, Sodium bisulphite, Ammonium sulphite, Sodium sulphite

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.

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US/Canadian Label Statements:

CONTAINS: Ammonium thiosulphate (7783-18-8), Sodium bisulphite (7631-90-5), Ammonium sulphite (10196-04-0), Sodium sulphite (7757-83-7)

WARNING!

MAY BE HARMFUL IF SWALLOWED.

CAUSES EYE IRRITATION

DRIED PRODUCT RESIDUE CAN ACT AS A REDUCING AGENT.

Keep container tightly closed to prevent the loss of water.

Keep from contact with clothing and other materials. Remove and wash contaminated clothing promptly.

Avoid breathing mist or vapour.

Avoid contact with eyes, skin, and clothing.

Use only with adequate ventilation.

Wash thoroughly after handling.

FIRST AID: If inhaled, remove to fresh air. Get medical attention if symptoms occur. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. Wash off with soap and water. Get medical attention if symptoms occur. 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.

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. Collect in a noncombustible container for prompt disposal. Clean surface thoroughly to remove residual contamination. For Large Spills: Flush with plenty of water.

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

Product name: KODAK PROFESSIONAL, Single-Use Chemistry Kit, Process E-6, Final Rinse

Product code: 1077643 - Final Rinse

Supplier: EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York, 14650

For Emergency Health, Safety & Environmental Information, call (585) 722-5151 (USA)

For other information or to request an MSDS, call (800) 242-2424.

Synonyms: PCD 6326

Product Use: Professional colour film photographic processing solution, For industrial use only.

2. Hazards identification

CONTAINS: Butanedioic acid, sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (577-11-7), Octylphenoxypolyethoxyethanol (9036-19-5), Isothiazolone derivatives (proprietary)

WARNING!

HARMFUL IF SWALLOWED

CAUSES SKIN AND EYE IRRITATION

MAY CAUSE ALLERGIC SKIN REACTION

HMIS III Hazard Ratings: Health - 2, Flammability - 0, Reactivity (Stability) - 0

NFPA Hazard Ratings: Health - 2, 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 %	Components - (CAS-No.)
1 - 5	Octylphenoxypolyethoxyethanol (9036-19-5)
1 - 5	Butanedioic acid, sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (577-11-7)
0.1 - < 0.25	Isothiazolone derivatives (proprietary)

4. First aid measures

Inhalation: If inhaled, remove 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. Get medical attention.

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Skin: 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

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

Special Fire-Fighting Procedures: None (noncombustible)

Hazardous Combustion Products: None (noncombustible)

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. Clean surface thoroughly to remove residual contamination.

7. Handling and storage

Personal precautions: Avoid prolonged or repeated breathing of mist or vapour. Use only with adequate ventilation. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

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

Storage: Keep container tightly closed.

8. Exposure controls/personal protection

Occupational exposure controls: Not established

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 under normal conditions of use.

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

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Physical form: liquid

Colour: light green

Odour: slight

Specific gravity: 1.005

Vapour pressure: 24 mbar (18.0 mm Hg)

Vapour density: 0.6

Volatile fraction by weight: 95 - 100 %

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

Water solubility: complete

pH: 4.6

Flash point: does not flash

10. Stability and reactivity

Stability: Stable under normal conditions.

Incompatibility: None with common materials and contaminants with which the material may reasonably come into contact.

Hazardous decomposition products: None under normal conditions of use.

Hazardous Polymerization: Hazardous polymerisation does not occur.

11. Toxicological information

Effects of Exposure

Inhalation: Expected to be a low hazard for recommended handling. Airborne dust/mist/vapor may be irritating.

Eyes: Causes eye irritation.

Skin: Causes skin irritation. May cause allergic skin reaction based on human experience.

Ingestion: Harmful if swallowed. May cause irritation of the gastrointestinal tract.

12. Ecological information

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

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Potential Toxicity:

Toxicity to fish:	> 100 mg/l
Toxicity to daphnia:	no data available
Toxicity to algae:	> 100 mg/l
Toxicity to other organisms:	> 100 mg/l

Persistence and degradability: Readily biodegradable.

Chemical Oxygen Demand (COD): 123 g/l

Biochemical Oxygen Demand (BOD): 42 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

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
EINECS	n (Negative listing)
TSCA	y (positive listing)
AICS	y (positive listing)
DSL	y (positive listing)
ENCS (JP)	y (positive listing)
KECI (KR)	y (positive listing)
PICCS (PH)	y (positive listing)
INV (CN)	y (positive listing)

A N (Negative listing) 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

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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:	WARNING! This product contains a chemical known in the State of California to cause cancer.
US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323):	Water
US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000):	No components are subject to the Massachusetts Right to Know Act.
US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5):	Water, Butanedioic acid, sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt, Octylphenoxypolyethoxyethanol
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:	SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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:

CONTAINS: Butanedioic acid, sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (577-11-7), Octylphenoxypolyethoxyethanol (9036-19-5), Isothiazolone derivatives (proprietary)

**WARNING!
HARMFUL IF SWALLOWED**

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CAUSES SKIN AND EYE IRRITATION MAY CAUSE ALLERGIC SKIN REACTION

Avoid prolonged or repeated breathing of mist or vapour.
Use only with adequate ventilation.
Avoid contact with eyes, skin, and clothing.
Wash thoroughly after handling.

FIRST AID: If inhaled, remove to fresh air. Get medical attention if symptoms occur. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. 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. 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.

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, then place in a container for chemical waste. 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