

Material Safety Data Sheet



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

Product name: KODAK PROFESSIONAL Color Developer Starter II, Process E-6

Product code: 1858158

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

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

For Other Information, call 61 3 8417 8000.

Synonyms: PCD 6456

Product Use: photographic processing chemical (developer/activator), For industrial use only.

2. Hazards identification

STATEMENT OF HAZARDOUS NATURE: Hazardous according to criteria of Australian Safety and Compensation Council

Corrosive. Causes burns.

Poisons Schedule: 5

Contains: Acetic acid

3. Composition/information on ingredients

Weight %	Components (CAS-No.)
30 - 35	Acetic acid (64-19-7)
10 - 15	Sodium bromide (7647-15-6)

4. First aid measures

Inhalation: If inhaled, remove to fresh air. Get medical attention immediately.

Eyes: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Get medical attention.

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

5. Fire-fighting measures

Hazchem Code: 2R

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

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

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

Unusual Fire and Explosion Hazards: None.

6. Accidental release measures

Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Contaminated absorbent should be disposed of in accordance with local regulations. Clean surface thoroughly to remove residual contamination.

7. Handling and storage

Personal precautions: Do not breathe mist or vapour at concentrations greater than the exposure limits. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Use only with adequate ventilation. Wash thoroughly after handling.

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

Storage: Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section.)

8. Exposure controls/personal protection

Occupational exposure controls

Chemical Name	Regulatory List	Value Type	Value
Acetic acid	Exposure Standards	time weighted average	10 ppm 25 mg/m ³
Acetic acid	WEL	Short term exposure limit	15 ppm 37 mg/m ³
		time weighted average	10 ppm 25 mg/m ³
		Short term exposure limit	15 ppm 37 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: 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: If a full-face respirator is not worn, 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

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Physical form: liquid

Colour: light yellow

Odour: strong acetic acid

Specific gravity: 1.14

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

Vapour density: 0.6

Volatile fraction by weight: 55 - 60 %

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

Water solubility: complete

pH: 1.3

Flash point: does not flash

Flammability Limits: Not specified

10. Stability and reactivity

Stability: Stable under normal conditions.

Incompatibility: Bases

Hazardous decomposition products: Carbon oxides, hydrogen bromide.

Hazardous Polymerization: Hazardous polymerisation does not occur.

11. Toxicological information

Effects of Exposure

General advice:

Contains: Acetic acid. Acute overexposure to extremely high airborne concentrations of respiratory irritants has been associated with development of an asthma-like reactive airways syndrome (RADS) in susceptible individuals. Extremely high airborne concentrations are not generated during normal conditions of use but may occur following a spill. The potential to generate extremely high airborne concentrations in a spill situation depends upon physical factors such as the concentration of the solution, the volume of the spill, the surface area of the spill, the size of the room where the spill occurred, and the ventilation rate in the room.

Contains: Sodium bromide. Ingestion of bromide salts can cause nausea, vomiting, headache, irritability, delirium, memory loss, decreased appetite, joint pain, hallucinations, stupor, coma, and acne like rash on face, legs, and trunk.

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

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Eyes: Causes burns.

Skin: Causes burns.

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

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
- Skin irritation: severe
- Eye irritation (washed eyes): severe
- Eye irritation (unwashed eyes): severe

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

Acute Toxicity Data:

Oral LD50 (rat): 3,400 mg/kg

- Dermal LD50 (rabbit): > 2,000 mg/kg
- Skin irritation: none
- Skin Sensitization: none
- Eye irritation: slight

12. Ecological information

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

Potential Toxicity:

Toxicity to fish (LC50): > 100 mg/l

Toxicity to daphnia (EC50): > 100 mg/l

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

Toxicity to other organisms (EC50): > 1,000 mg/l (sludge)

Persistence and degradability: Readily biodegradable.

Chemical Oxygen Demand (COD): ca. 386 g/l

Biochemical Oxygen Demand (BOD): ca. 277 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

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

ADG: UN-Number: UN2790
Proper shipping name: ACETIC ACID, SOLUTION
Class: 8
Packaging group: III

IATA: UN-Number: UN2790
Proper shipping name: ACETIC ACID SOLUTION
Class: 8
Packaging group: III

IMDG: UN-Number: UN2790
Proper shipping name: ACETIC ACID, 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
TSCA	All listed
DSL	All listed
NDSL	None listed
EINECS	All listed
ELINCS	None listed
NLP	None listed
AICS	All listed
IECS	All listed
ENCS	All listed
ECI	All listed
NZIoC	All listed
PICCS	All listed

"Not all listed" indicates one or more component is either not on the public Inventory or is subject to exemption requirements. If additional information is needed contact Kodak.

Poisons Schedule: 5

Australian Safety and Compensation Council: none

Other regulations

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Australia National Model Regulations for the Control of
Scheduled Carcinogenic Substances

No components listed

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. The actual label information will depend upon the intended use of the product. Australian Safety and Compensation Council labeling appears for commercial/industrial use.

Australian Safety and Compensation Council Labeling:

Contains: Acetic acid 32.7%

pH: 1 - 3



Symbol/Indication of Danger:

C: Corrosive

Risk Phrases:

R34: Causes burns.

Safety Phrases:

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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

CAUTION
KEEP OUT OF REACH OF CHILDREN
DO NOT SWALLOW
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Contains: Acetic acid (436.24 g/L)

Warning: Corrosive.

Safety Phrases: Avoid contact with eyes. Avoid contact with skin. Avoid breathing dust (or) vapour (or) spray mist.

First aid: For advice, contact a Poisons Information Centre (Australia 13 1126; New Zealand 0800 764 766) or a doctor. If swallowed, do NOT induce vomiting. If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or

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a doctor, or for at least 15 minutes. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running 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.

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