KODAK Indicator Stop Bath

MATERIAL SAFETY DATA SHEET

000007423/F/AUS
Approval Date: 2002-09-19 Revision
Print Date: 01.02.2003

Supersedes MSDS No. 000007423 dated 05.05.1998

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: KODAK Indicator Stop Bath

Catalog Number(s): 402 6266 - To Make 1 litre
146 4247 - To Make 8 gallons (U.S.) (to make 30 litres)

Manufacturer: EASTMAN KODAK COMPANY, Rochester, New York 14650

Supplier: KODAK AUSTRALASIA Pty. Ltd., 173 Elizabeth Street, Coburg, Victoria 3058, AUSTRALIA

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

For other information, call 61 3 9353 2222

Synonym(s): PCD 2838

Product Use: Photographic processing chemical

2. COMPOSITION/INFORMATION ON INGREDIENTS

Weight % - Component - (CAS Registry No.)
Concentrate:
85-90 Acetic acid (000064-19-7)
10-15 Water (007732-18-5)
< 0.1 Bromocresol purple (000115-40-2)

Working solution:
95-100 Water (007732-18-5)
1-5 Acetic acid (000064-19-7)

3. HAZARDS IDENTIFICATION

Concentrate:

http://www.kodak.com/cgi-bin/webCatalog.pf?cc=AU&lc=en&product=KODAK+Indicator+Stop+Bath
STATEMENT OF HAZARDOUS NATURE: Hazardous according to criteria of Worksafe Australia

CORROSIVE, Causes burns. Flammable
Poisons Schedule: 6
CONTAINS Acetic acid

Working solution:

STATEMENT OF HAZARDOUS NATURE: Not classified as hazardous according to criteria of Worksafe Australia

Contains no scheduled poisons

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4. FIRST-AID MEASURES

Inhalation: If symptomatic, move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately.

Eyes: Immediately flush with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin: Immediately remove contaminated clothing and shoes and wash with soap and plenty of water. Get medical attention if symptoms occur. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Ingestion:

Concentrate: Do NOT induce vomiting. Give victim a glass of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

working solution: Drink 1-2 glasses of water. Seek medical attention. Never give anything by mouth to an unconscious person.

First Aid Facilities: Not specified

Note to Physicians: Not specified

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5. FIRE FIGHTING MEASURES

Hazchem Code: 2P

Extinguishing Media: Water spray. Use appropriate agent for adjacent fire.

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing. Use water spray to keep fire-exposed containers cool.

Special Exposure Hazards: None

Unusual Fire and Explosion Hazards: Flammable

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6. ACCIDENTAL RELEASE MEASURES

Eliminate all ignition sources. May require neutralization if pH < 2.0 or > 12.5. 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 Precautionary Measures: Do not breathe vapour at concentrations greater than the exposure limits. Do not get in eyes, on skin, on clothing. Use only with adequate ventilation. Wash thoroughly after handling.

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

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards:

ACGIH Threshold Limit Value (TLV):

Acetic acid: 10 ppm TWA, 15 ppm STEL

WORXSAFE AUSTRALIA National Exposure Standards:

Acetic acid: 10 ppm TWA; 15 ppm STEL

Ventilation: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure standards.

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 vapor cartridge. If respirators are used, a program should be instituted to assure compliance with WORKSAFE AUSTRALIA standard AS/NZS 1716 : 1994.

Eye Protection: Wear safety glasses with side shields (or goggles) and a face shield.

Skin Protection: Wear impervious gloves and protective clothing appropriate for the risk of exposure.

Recommended Decontamination Facilities: Eye bath, washing facilities, safety shower

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Liquid

Color: Light yellow

Odor: Sharp vinegar

Specific Gravity (water = 1):

Concentrate 1.07

Working solution 1.00

Vapour Pressure at 20°C (-68°F): 19.5 mbar (14.6 mm Hg)

Vapour Density (Air = 1): 1.9

Volatile Fraction by Weight: 100 %

Boiling Point: >100°C (>212°F)

Solubility in Water: Complete

pH:

Concentrate: < 2

Working solution: 2-3

Flash Point (Setaflash closed cup): 53°C (128°F)

http://www.kodak.com/cgi-bin/webCatalog.pl?cc=AU&lc=en&product=KODAK+Indicator+Stop+Bath
Flammability Limits: not specified

10. STABILITY AND REACTIVITY

Stability: Stable

Incompatibility: Strong oxidizing agents, bases

Hazardous Decomposition Products: None

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Effects of Exposure:

Inhalation:

Concentrate: Vapour extremely irritating.

Working solution: Expected to be a low hazard for recommended handling.

Eyes:

Concentrate: Causes burns. Vapour extremely irritating.

Working solution: May be irritating.

Skin:

Concentrate: Causes burns.

Working solution: Low hazard for recommended handling.

Ingestion:

Concentrate: May be harmful if swallowed. May cause burns of the gastrointestinal tract if swallowed.

Working solution: Expected to be a low ingestion hazard.

Acute Toxicity Data:

Data for glacial acetic acid (95%)

Oral LD-50 (rat): 3.3 g/kg
Oral LD-50 (mouse): 4.9 g/kg
Inhalation LCLo (rat): 16,000 ppm/4 hour(s)
Inhalation LCLo (mouse): 5620 ppm/i hour(s)
Dermal LD-50: 1.06 g/kg
Skin irritation: severe
Eye irritation: severe

Chronic, Effects: Not specified

12. ECOLOGICAL INFORMATION

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

<table>
<thead>
<tr>
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<th>Fish LC50 mg/l:</th>
<th>Daphnid EC50 mg/l:</th>
<th>Algal IC50 mg/l:</th>
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<tbody>
<tr>
<td></td>
<td>10-100</td>
<td>10-100</td>
<td>&gt;100</td>
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<td>&gt;100</td>
<td>&gt;100</td>
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Organics Readily Degradable (>70%):

|                       | Yes (7 days)    | Yes (7 days)       |

Potential Bioaccumulation:

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<tr>
<th>COD (approximate g/l):</th>
<th>940</th>
<th>680</th>
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<tr>
<td>BOD5 (approximate g/l):</td>
<td>15</td>
<td>10</td>
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Potential Toxicity Waste treatment microorganisms EC50 (mg/l):

|                       | >100            | >100               |

13. DISPOSAL CONSIDERATIONS

Discharge, treatment, or disposal may be subject to Commonwealth, States or local laws. Contract with a licensed chemical disposal agency. 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.

United Nations

UN Number: 2789
Proper Shipping Name: Acetic acid solution (>80%)
Packing Group: II

Air - International Civil Aviation Organization (ICAO)
ICAO Status: NA

Sea - International Maritime Dangerous Goods (IMDG)
IMDG Class: 8 - LQ

Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code)
Dangerous good class: 8
Subsidiary Risk: 3

R = Regulated, NR = Not Regulated, NA = Not Accepted, LQ = Limited Quantity, EX = Exempted Quantity, CAO = Cargo Aircraft Only

15. REGULATORY INFORMATION

Poisons Schedule:
Concentrate: 6
Working solution: Not specified
Carcinogenicity Classification (components present at 0.1% or more):
- International Agency for Research on Cancer (IARC): None
- American Conference of Governmental Industrial Hygienists (ACGIH): None
- National Toxicology Program (NTP): None
- Occupational Safety and Health Administration (OSHA): None
- Worksafe Australia: None

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. Worksafe Australia labeling appears for commercial/industrial use.

Worksafe Australia Labeling:

Concentrate:
- Contains acetic acid 85-90%
- pH < 1
- Hazard Category: C - Corrosive
- Risk Phrases: R10 Flammable, R34 Causes burns.
- Safety Phrases: S23 Do not breathe vapour, S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice, S45 In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre immediately (show the label where possible).

Working solution:

Not classified as hazardous according to criteria of Worksafe Australia

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

Concentrate:

POISON
NOT TO BE TAKEN
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING
FOR PHOTOGRAPHIC PURPOSES ONLY

CONTAINS 912 g/l acetic acid solution

WARNING: CORROSIVE

SAFETY DIRECTIONS: Avoid contact with skin or eyes. Avoid breathing dust (or) vapour (or) spray mist.

FIRST AID: If poisoning occurs, contact a doctor or Poisons Information Centre (Australia 131126; New Zealand 03 4747000). If swallowed, DO NOT induce vomiting. Give a glass of water. If skin contact occurs, remove contaminated clothing and wash skin thoroughly. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

Working solution:

http://www.kodak.com/cgi-bin/webCatalog.pl?cc=AU&ic.en&product=KODAK+Indicator+Stop+Bath
CONTAINS NO SCHEDULED POISONS

SAFETY DIRECTIONS: Avoid contact with skin or eyes.

FIRST AID: No first aid instructions are recommended for labelling purposes.

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment. The information relating to the working solution is for guidance purposes only, and is based on correct mixing and use of the product according to instructions.

Eastman Kodak Hazard Ratings:
Concentrate: R-2, S-3, F-2, C-0
WS: R-1, S-2, F-0, C-0