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

**Product name:** Indicator Stop Bath

**Product code:** 5160346

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

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

For further information about this product, call (800) 242-2424.

**Synonyms:** PCD 2838

**Product Use:** photographic processing chemical, For consumer and industrial use.

2. Hazards identification

**CONTAINS:** Acetic acid (64-19-7)

**DANGER!**

**COMBUSTIBLE LIQUID AND VAPOR**
POISON
MAY BE FATAL OR HARMFUL IF SWALLOWED
DUST, MIST OR VAPOUR EXTREMELY IRRITATING TO THE EYES AND RESPIRATORY TRACT
CAUSES SEVERE SKIN AND EYE BURNS

**HMIS III Hazard Ratings:** Health - 3, Flammability - 2, Physical Hazard - 0

**NFPA Hazard Ratings:** Health - 3, Flammability - 2, 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

<table>
<thead>
<tr>
<th>Weight percent</th>
<th>Components - (CAS-No.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>85 - 90</td>
<td>Acetic acid (64-19-7)</td>
</tr>
</tbody>
</table>
4. First aid measures

**Inhalation:** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

**Skin:** IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before re-use. Immediately call a POISON CENTER or doctor/physician.

**Ingestion:** IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

5. Fire-fighting measures

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

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

**Hazardous Combustion Products:** Carbon oxides

**Unusual Fire and Explosion Hazards:** Combustible Material contains a combustible solvent that may accumulate in the container headspace.

6. Accidental release measures

Remove all sources of ignition. 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 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. Do not eat, drink or smoke when using this product.

**Prevention of Fire and Explosion:** Keep away from heat and sources of ignition. Keep from contact with oxidizing materials. Use only with adequate ventilation.

**Storage:** Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section.)
8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Regulatory List</th>
<th>Value Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic acid</td>
<td>ACGIH</td>
<td>time weighted average</td>
<td>10 ppm</td>
</tr>
<tr>
<td></td>
<td>ACGIH</td>
<td>Short term exposure limit</td>
<td>15 ppm</td>
</tr>
<tr>
<td></td>
<td>OSHA</td>
<td>time weighted average</td>
<td>10 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

**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 vapour-tight chemical goggle and a face shield.

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

9. Physical and chemical properties

**Physical form:** liquid

**Colour:** light yellow

**Odour:** sharp vinegar

**Specific gravity:** 1.07

**Vapour pressure:** 19.5 mbar (14.6 mm Hg)

**Vapour density:** 1.9

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

**Water solubility:** complete

**pH:** 2

**Flash point:** 53.3 °C (127.9 °F)
10. Stability and reactivity

**Stability:** Stable under normal conditions.

**Incompatibility:** Strong oxidizing agents, Bases, Amines, Metals.

**Hazardous decomposition products:** None under normal conditions of use.

**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.

**Inhalation:** Airborne dust/mist/vapor extremely irritating.

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

**Skin:** Causes severe skin burns.

**Ingestion:** May be fatal or harmful if swallowed. 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 (rat): 11.4 mg/l 4641 ppm / 4 hr
- Dermal LD50: 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 (LC50): 10 - 100 mg/l
- Toxicity to daphnia (EC50): 10 - 100 mg/l

**Persistence and degradability:** Readily biodegradable.

### 13. Disposal considerations

Discharge, treatment, or disposal may be subject to federal, state, commonwealth, provincial, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied.

### 14. Transport information

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: UN2789
- Proper shipping name: ACETIC ACID SOLUTION
- Class: 8
- Sub-risks: 3
- Packaging group: II

**IMDG:**

- UN number: UN2789
- Proper shipping name: ACETIC ACID, SOLUTION
- Class: 8
- Sub-risks: 3
- Packaging group: II

**US DOT:**

- UN number: UN2789
- Proper shipping name: ACETIC ACID SOLUTION
- Class: 8
- Sub-risks: 3
- Packaging group: II
For more transportation information, go to: www.kodak.com/go/ship.

15. Regulatory information

Notification status

<table>
<thead>
<tr>
<th>Regulatory List</th>
<th>Notification status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>All listed</td>
</tr>
<tr>
<td>DSL</td>
<td>All listed</td>
</tr>
<tr>
<td>NDSL</td>
<td>None listed</td>
</tr>
<tr>
<td>EINECS</td>
<td>All listed</td>
</tr>
<tr>
<td>ELINCS</td>
<td>None listed</td>
</tr>
<tr>
<td>NLP</td>
<td>None listed</td>
</tr>
<tr>
<td>AICS</td>
<td>All listed</td>
</tr>
<tr>
<td>IECS</td>
<td>All listed</td>
</tr>
<tr>
<td>ENCS</td>
<td>All listed</td>
</tr>
<tr>
<td>ECI</td>
<td>Not all listed</td>
</tr>
<tr>
<td>NZIoC</td>
<td>All listed</td>
</tr>
<tr>
<td>PICCS</td>
<td>All listed</td>
</tr>
</tbody>
</table>

"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.

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
| **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 defects, or any other reproductive harm. |
| **U.S. - CERCLA/SARA (40 CFR § 302.4 Designation of hazardous substances):** | Acetic acid |
| **U.S. - CERCLA/SARA - Section 302 (40 CFR § 355 Appendixes A and B - The List of Extremely Hazardous Substances and Their Threshold Planning Quantities):** | No components of this product are subject to the SARA Section 302 (40 CFR 355) reporting requirements. |
| **U.S. - CERCLA/SARA - Section 313 (40 CFR § 372.65 Toxic Chemical Release Reporting):** | No components of this product are subject to the SARA Section 313 (40 CFR 372.65) reporting requirements. |
| **U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances:** | Acetic acid |
| **U.S. - California - 8 CCR Section 5200-5220 - Specifically Regulated Carcinogens:** | No components found on the California Specifically Regulated Carcinogens List. |
| **U.S. - California - 8 CCR Section 5203 Carcinogens:** | No components found on the California Section 5203 Carcinogens List. |
| **U.S. - California - 8 CCR Section 5209 Carcinogens:** | No components found on the California Section 5209 Carcinogens List. |
| **U.S. - Massachusetts - General Law Chapter 111F (MGL c 111F) - Hazardous Substances Disclosure by Employers (a.k.a. Right to Know Law):** | Acetic acid |
| **U.S. - Minnesota - Employee Right-to-Know (5206.0400, Subpart 5. List of Hazardous Substances):** | Acetic acid |
| **U.S. - New Jersey - Worker and Community Right to Know Act (N.J.S.A. 34:5A-1):** | Acetic acid |
| **U.S. - Pennsylvania - Part XIII. Worker and Community** | Acetic acid, Water |
Material Safety Data Sheet

Right-to-Know Act (Chapter 323 Hazardous Substance List, Appendix A):

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:

Indicator Stop Bath
CONTAINS: Acetic acid (64-19-7).
DANGER! COMBUSTIBLE LIQUID AND VAPOR. POISON. MAY BE FATAL OR HARMFUL IF SWALLOWED. DUST, MIST OR VAPOUR EXTREMELY IRRITATING TO THE EYES AND RESPIRATORY TRACT. CAUSES SEVERE SKIN AND EYE BURNS.

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. Keep away from heat and sources of ignition. FIRST AID: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before re-use. Immediately call a POISON CENTER or doctor/physician. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician. 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: Remove all sources of ignition. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Additional Components Include: Water (7732-18-5), Phenol, 4,4’-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis(2-bromo-6-methyl- (115-40-2).

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-2, C-0