1. Identification

Product identifier: Professional Rapid Fix Part A

Other means of identification:
- SDS number: PCD 4896
- Product code: 1059914

Recommended use: Photographic processing chemical. (fixer).

Recommended restrictions: For industrial use only.

Manufacturer/Importer/Supplier/Distributor information:
- Supplier: Kodak Alaris Inc
- Address: 336 Initiative Drive, Rochester, NY 14624
- e-mail: EHS-Questions@Kodakalaris.com
- Emergency telephone number: 1-800-424-9300 OR +1 703-741-5970

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards:
- Skin corrosion/irritation: Category 2
- Serious eye damage/eye irritation: Category 2A
- Reproductive toxicity: Category 1B

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements:

Signal word: Danger

Hazard statement: Causes skin irritation. Causes serious eye irritation. May damage fertility or the unborn child.

Precautionary statement:

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response: If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC): Dried product residue can act as a reducing agent.

Supplemental information: None.

3. Composition/information on ingredients

Mixtures:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium thiosulphate</td>
<td></td>
<td>7783-18-8</td>
<td>40 - 45</td>
</tr>
</tbody>
</table>
### Chemical names and synonyms

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic acid</td>
<td></td>
<td>64-19-7</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Ammonium sulphite</td>
<td></td>
<td>10196-04-0</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Boric acid</td>
<td></td>
<td>10043-35-3</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Sodium hydrogensulfite</td>
<td></td>
<td>7631-90-5</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

All concentrations are in percent by weight. Chemical ranges are provided in lieu of exact percentages, which are withheld as trade secrets.

### 4. First-aid measures

#### Inhalation
Move to fresh air. Call a physician if symptoms develop or persist.

#### Skin contact
Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

#### Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

#### Ingestion
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

#### Most important symptoms/effects, acute and delayed

### Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

#### General information
IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

### 5. Fire-fighting measures

#### Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

#### Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

#### Special protective equipment and precautions for firefighters
Wear self-contained breathing apparatus and protective clothing.

#### Fire fighting equipment/instructions
Move containers from fire area if you can do so without risk.

#### Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

#### General fire hazards
No unusual fire or explosion hazards noted.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

#### Methods and materials for containment and cleaning up
Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

#### Environmental precautions
Avoid discharge into drains, water courses or onto the ground.

### 7. Handling and storage

#### Precautions for safe handling
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
8. Exposure controls/personal protection

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)</th>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic acid (CAS 64-19-7)</td>
<td>PEL</td>
<td></td>
<td>25 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10 ppm</td>
</tr>
</tbody>
</table>

**US. ACGIH Threshold Limit Values**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic acid (CAS 64-19-7)</td>
<td>STEL</td>
<td>15 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>10 ppm</td>
<td></td>
</tr>
<tr>
<td>Boric acid (CAS 10043-35-3)</td>
<td>STEL</td>
<td>6 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>2 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>Sodium hydrogensulfite (CAS 7631-90-5)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

**US. NIOSH: Pocket Guide to Chemical Hazards**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic acid (CAS 64-19-7)</td>
<td>STEL</td>
<td>37 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>25 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 ppm</td>
</tr>
<tr>
<td>Sodium hydrogensulfite (CAS 7631-90-5)</td>
<td>TWA</td>
<td>5 mg/m³</td>
</tr>
</tbody>
</table>

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Wear safety glasses with side shields (or goggles).

**Skin protection**

Wear protective gloves.

**Other**

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection**

In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

**Appearance**

**Physical state**

Liquid.

**Form**

Liquid.

**Color**

Light yellow.

**Odor**

Slight sulphur, slight acetic acid

**Odor threshold**

Not available.

**pH**

5

**Melting point/freezing point**

Not available.
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial boiling point and boiling range</td>
<td>&gt; 212 °F (&gt; 100 °C)</td>
</tr>
<tr>
<td>Flash point</td>
<td>does not flash</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td></td>
</tr>
<tr>
<td>Flammability limit - lower (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability limit - upper (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive limit - lower (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive limit - upper (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>18 hPa</td>
</tr>
<tr>
<td>Vapor density</td>
<td>0.6</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.32</td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>Complete</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other information</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not explosive.</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Not oxidizing.</td>
</tr>
</tbody>
</table>

### 10. Stability and reactivity

**Reactivity**
The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability**
Material is stable under normal conditions.

**Possibility of hazardous reactions**
No dangerous reaction known under conditions of normal use.

**Conditions to avoid**
Contact with incompatible materials.

**Incompatible materials**

**Hazardous decomposition products**

### 11. Toxicological information

**Information on likely routes of exposure**

**Inhalation**
Prolonged inhalation may be harmful. Some asthmatics or hypersensitive individuals may experience difficult breathing after inhaling sulfite salts.

**Skin contact**
Causes skin irritation.

**Eye contact**
Causes serious eye 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.

**Symptoms related to the physical, chemical and toxicological characteristics**
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

**Information on toxicological effects**

**Acute toxicity**
### Components Test Results

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic acid (CAS 64-19-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>3320 mg/kg</td>
</tr>
<tr>
<td>Boric acid (CAS 10043-35-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>2660 mg/kg</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**
- Causes skin irritation.

**Serious eye damage/eye irritation**
- Causes serious eye irritation.

**Respiratory or skin sensitization**
- **Respiratory sensitization**
  - Not a respiratory sensitizer.
- **Skin sensitization**
  - This product is not expected to cause skin sensitization.
- **Germ cell mutagenicity**
  - No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**
- This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
  - IARC Monographs. Overall Evaluation of Carcinogenicity
    - Sodium hydrogensulfite (CAS 7631-90-5) Not classifiable as to carcinogenicity to humans.
    - Not regulated.
  - US. National Toxicology Program (NTP) Report on Carcinogens
    - Not listed.

**Reproductive toxicity**
- May damage fertility or the unborn child.

**Specific target organ toxicity - single exposure**
- Not classified.

**Specific target organ toxicity - repeated exposure**
- Not classified.

**Aspiration hazard**
- Not an aspiration hazard.

**Chronic effects**
- Prolonged inhalation may be harmful.

### Ecological information

**Ecotoxicity**
- The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boric acid (CAS 10043-35-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Razorback sucker (Xyrauchen texanus) &gt; 100 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

**Persistence and degradability**
- Not readily biodegradable.

**Bioaccumulative potential**
- **Partition coefficient n-octanol / water (log Kow)**
  - Acetic acid
    - -0.17

**Mobility in soil**
- No data available.

**Other adverse effects**
- No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### Disposal considerations

**Disposal instructions**
- Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations**
- Dispose in accordance with all applicable regulations.
**Hazardous waste code**
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products**
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging**
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

**DOT**
Not regulated as dangerous goods.

**IATA**
Not regulated as dangerous goods.

**IMDG**
Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
Not established.

### 15. Regulatory information

**US federal regulations**
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

- **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**
  Not regulated.

- **CERCLA Hazardous Substance List (40 CFR 302.4)**
  Acetic acid (CAS 64-19-7) Listed.
  Ammonium sulphite (CAS 10196-04-0) Listed.
  Sodium hydrogensulfite (CAS 7631-90-5) Listed.

- **SARA 304 Emergency release notification**
  Not regulated.

  Not regulated.

- **Superfund Amendments and Reauthorization Act of 1986 (SARA)**
  SARA 302 Extremely hazardous substance Not listed.
  SARA 311/312 Hazardous chemical
    
  Yes
  SARA 313 (TRI reporting)
  Not regulated.

**Other federal regulations**

- **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**
  Not regulated.

- **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**
  Not regulated.

- **Safe Drinking Water Act (SDWA)**
  Not regulated.

- **FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**
  Acetic acid (CAS 64-19-7) High priority

**US state regulations**

- **California Proposition 65**
  California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

- **US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**
  Boric acid (CAS 10043-35-3)
### International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

### 16. Other information, including date of preparation or last revision

- **Issue date**: 05-20-2019
- **Version #**: 01
- **HMIS® ratings**: Health: 2*, Flammability: 1, Physical hazard: 0
- **NFPA ratings**: Health: 2, Flammability: 1, Instability: 0

References: ECHA: European Chemical Agency.

Disclaimer: Kodak Alaris cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.