**Fixer**

**FUNCTION**

The fixer converts silver bromide into soluble silver compounds.

Some aeration of the fixer is required to control the concentration of ferrous ammonium EDTA (iron [II]) carried in from the bleach. However, overaeration can cause fixer sulfurization or formation of silver sulfide. For best results, aerate the fixer only when film is in the solution.

**COMPONENTS**

**Silver Halide Solvent:**
Ammonium thiosulfate

The silver halide solvent reacts with silver bromide and converts it into soluble silver compounds, which are removed from the film in the final wash.

**Preservative:**
Sodium sulfite

Sodium sulfite acts as a preservative to protect the ammonium thiosulfate from oxidation.

**PREPARING A FRESH TANK SOLUTION**

**Note:** These instructions are for mixing solutions from KODAK Fixer and Replenisher, Process E-6AR (5-gallon flexible container).

For each litre of tank solution, mix 100 mL of concentrate with 900 mL of water.

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**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Aim</th>
<th>Tolerance</th>
<th>Acceptable Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time</strong></td>
<td>4 minutes</td>
<td>± 15 seconds</td>
<td>4 to 6 minutes</td>
</tr>
<tr>
<td><strong>Temperature</strong></td>
<td>92 to 103°F (33.3 to 39.4°C)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Replenishment Rate</strong></td>
<td>100 mL/ft²* (1076 mL/m²)*</td>
<td>± 15 mL/ft²† (± 160 mL/m²)†</td>
<td>—</td>
</tr>
</tbody>
</table>

**Specific Gravity**

| Seasoned Tank Solution | 1.040 to 1.090 at 80°F (27°C) | — | — |
| Fresh Tank Solution and Replenisher | 1.041 at 80°F (27°C) | ± 0.003 | — |
| | 1.038 at 100.4°F (38°C) | — | — |

Agitation

2-second air burst every 10 seconds (1/8-inch [17 mm] solution rise)

*You may have to double your replenishment rate for machines with low utilization.
†For optimum performance, maintain your replenishment rate to within ± 10% of the specified aim (± 15% tolerance allows for measurement “noise”). Overreplenishment has no adverse effect, but it is costly.
‡For rack-and-tank machines.

**Note:** Aerate only while film is in the solution; do not overaerate.