**Film Data Sheet**

**T-64**

**Tungsten 4x5 Sheet Film**

---

**Description**

Special tungsten (3200°K) balanced film for rich, saturated color prints, in 4 x 5 sheet format. Color-balanced for tungsten lighting, rich and saturated colors, excellent image sharpness and clarity, designed for long exposures (ideal @ 1/2 to 30 seconds).

**Key Applications**

- Professional photography (proofing for tungsten studios)
- Copystand photography
- Microscopy
- Scientific imaging

**Compatible Hardware**

- MP-4+ camera
- Any camera or instrument (especially microscopes) equipped with a Model 545 or 545i film holder

**Special Treatment**

Designed for long exposures

---

**Film Speed**

ISO 64/DIN 19

**Format**

4 x 5 in. (10.2 x 12.7 cm)

Sheet Film

**Image Area**

3 1/2 x 4 1/2 in. (9 x 11.4 cm)

**Finish**

Glossy

**Exposures per Unit**

20 exposures per box

**Development Time**

90 seconds at 70°F

---

**Caution**

This film uses a small amount of caustic paste. If any paste appears, avoid contact with skin, eyes and mouth and keep away from children and animals. **If you get some paste on your skin, wipe it off immediately, then wash with water to avoid an alkali burn.** If eye contact occurs, quickly wash the area with plenty of water and see a doctor. Keep discarded materials away from children, animals, clothing and furniture.

**Limited Warranty**

See information on the film box.

“Polaroid” and “Polacolor” are trademarks of Polaroid Corporation, Waltham, MA 02451 USA.
**Film Data Sheet**  
**Technical Data**

**T-64 Tungsten**  
**Instant Color Peel-Apart Films**

The information in this film data sheet represents the typical performance of Polaroid's T-64 Tungsten color films. Specific film lots may vary.

### Processing time and temperature

For best results process at temperatures above 60°F (16°C).

<table>
<thead>
<tr>
<th>Recommended speed (ISO)</th>
<th>64 / 19°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended processing time and temperature</td>
<td>90 sec. @ 70°F/21°C</td>
</tr>
<tr>
<td>Resolution (1000:1)</td>
<td>10 line pairs/mm</td>
</tr>
<tr>
<td>Contrast</td>
<td>Medium - High</td>
</tr>
</tbody>
</table>

### D-Max:

The density value for the film’s darkest black.

### D-Min:

The lowest density value that a film exhibits. In prints, the whiteness of the brightest highlight, relative to the unprocessed print.

### Slope:

The positive ratio of the log E increments of the straight line region of the curve, as determined by the 1/4-3/4 increment method. The slope of an H&D curve indicates the overall contrast of a film: low contrast slopes less than 1.10; medium contrast slopes from 1.10 to 1.70; high contrast slopes greater than 1.70.

### Processing Temperature and Time Table

<table>
<thead>
<tr>
<th>°F</th>
<th>°C</th>
<th>Time in seconds</th>
<th>Exposure Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>95</td>
<td>35</td>
<td>90</td>
<td>-1/3 stop</td>
</tr>
<tr>
<td>65-90</td>
<td>21-32</td>
<td>90</td>
<td>None</td>
</tr>
<tr>
<td>55</td>
<td>13</td>
<td>120</td>
<td>1/2 stop</td>
</tr>
</tbody>
</table>

---

**Characteristic H&D curves for normal development**

**Characteristic curves for cold development**

**Characteristic curves for hot development**
Reciprocity Law Failure
A wide range of shutter speeds can be used without loss of film speed. For longer exposure times, some exposure compensation is suggested.

Reciprocity Law Failure
The ability of the film to respond in a constant manner to a constant exposure (light intensity x time). Reciprocity failure occurs during very long or very short exposures, requiring the photographer to increase exposure.

Spectral Sensitivity
Shows the equivalent energy needed at each wavelength in order to activate the emulsion so that it produces a neutral density of .75.

<table>
<thead>
<tr>
<th>Shutter Speed</th>
<th>1/4000 to 1/30</th>
<th>1/15 to 4</th>
<th>8</th>
<th>16</th>
<th>32</th>
<th>64</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure Adjustment</td>
<td>Not recommended</td>
<td>+2/3 stop</td>
<td>None</td>
<td>+1/3 stop</td>
<td>+1/3 stop</td>
<td>+1/3 stop</td>
</tr>
<tr>
<td>Color Compensating Filter</td>
<td>-</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>CC05B</td>
<td>CC05B</td>
</tr>
</tbody>
</table>

Reciprocity: The ability of the film to respond in a constant manner to a constant exposure (light intensity x time). Reciprocity failure occurs during very long or very short exposures, requiring the photographer to increase exposure. Spectral Sensitivity: Shows the equivalent energy needed at each wavelength in order to activate the emulsion so that it produces a neutral density of .75.