

RAP-4 PLUS

Developer

FOR THE PROCESSING OF NEW TECHNOLOGY AND CONVENTIONAL RAPID ACCESS EMULSIONS.

description

RAP-4 PLUS Developer is a simple concentrated developer formulated for the processing of new technology and conventional emulsions. Such as imagesetting films, scanner films, daylight contact films and phototypesetting papers.

Starkwik Fixer is recommended as the companion product.



Fuji Hunt Graphic Arts Chemicals

product	catalog no.
RAP-4 PLUS Developer (2 x 5 L / ctn)	841615
Starkwik Fixer (4 x 5 L / ctn)	872940

direction for use

RAP-4 PLUS Developer is used for both the processor tank solution and the replenisher solution.

mixing

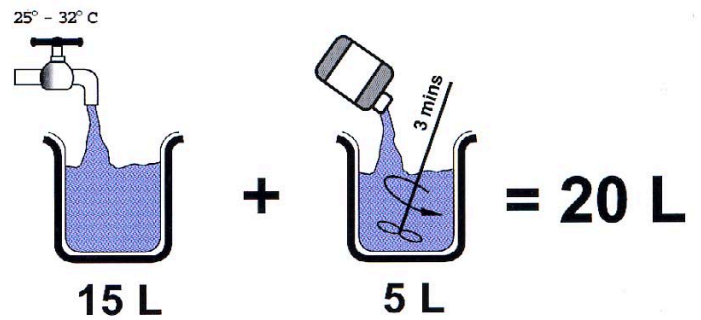
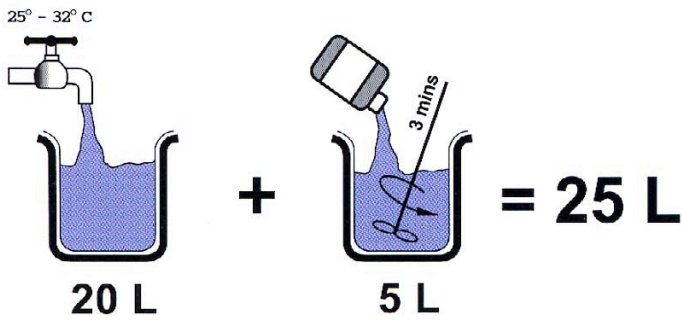
	RAP-4 PLUS Developer (concentrate : water)	Starkwik Fixer (concentrate : water)
For daylight contact films	1 + 4	1 + 3
For rapid access films	1 + 3	1 + 3
For new technology films (4th)	1 + 2	1 + 3

Mixing Instructions

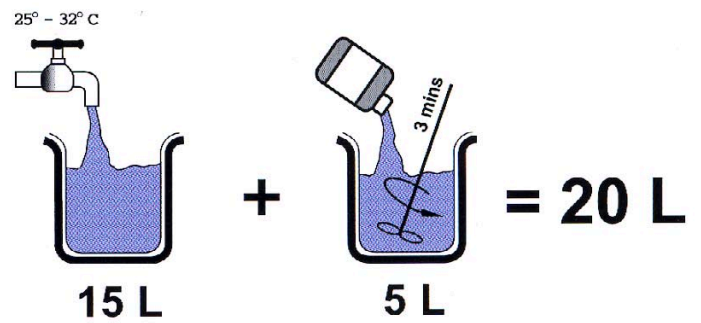
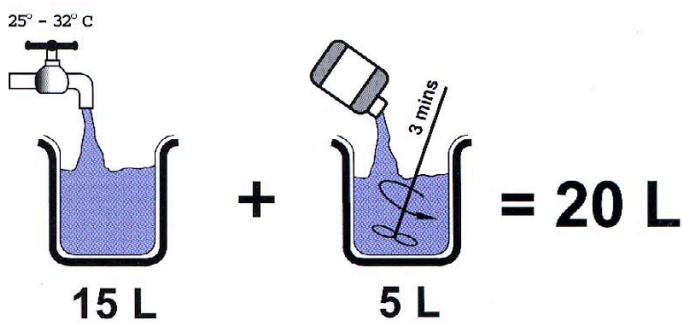
RAP - 4 plus Developer

Starkwik Fixer

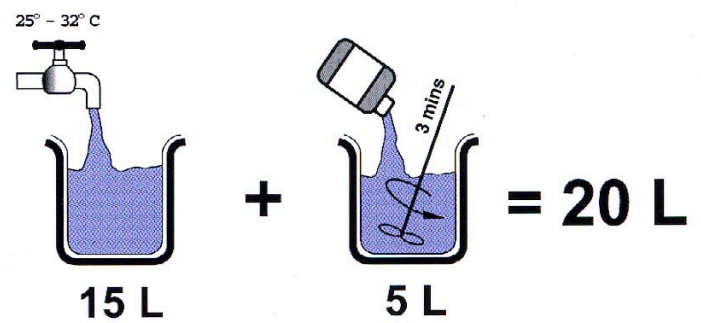
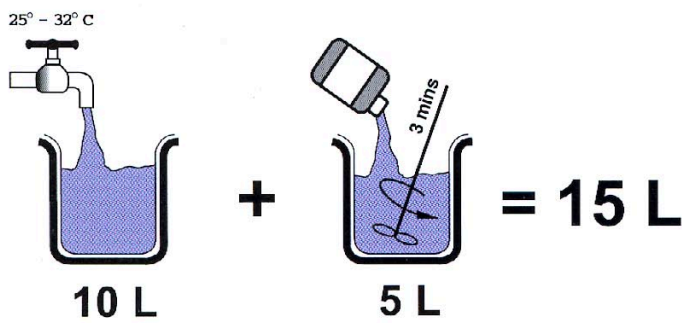
For daylight contact films



For rapid access films



For New Technology film (4th Generation)



development

The time of development should be varied to suit the films and papers utilized and the requirements of the individual user. It is recommended as follows: -

	rapid access films	new technology films (4th)
Temperature	30° to 38°	34° to 38°
Replenishment	250 to 350 ml/m ²	380 to 400 ml/m ²
Developing Time	30 to 40 sec	35 sec

fixation

Starkwik Fixer is to be at 1+3 dilution ratio. It is a liquid concentrate containing buffering and sequestering agents to withstand high developer carry-over thereby ensuring fast clearing times and clean running processors.

TROUBLE SHOOTING GUIDE

problem	probable cause (s)	correction
<p>Decrease in Density, (Decrease in developer activity or speed) Characteristics: • Line work too open • Not enough overall density. (pinholes and paste-up lines showing through).</p>	<ol style="list-style-type: none"> 1. Decreased development temperature. 2. Decreased development time. 3. Decreased agitation. 4. Under exposed. 5. Under-replenishment of processor. 6. Developer/Replenisher lines blocked. 7. Developer in machine oxidised due to non-use. 8. Developer/Replenisher oxidised (very brown in color). 9. Developer or Developer/Replenisher contaminated with Fixer. 10. New emulsion number. 	<ol style="list-style-type: none"> 1. Check temperature setting and verify temperature gauge with independent thermometer. 2. Check speed control. Check development time with stop watch and correct transport speed if timing is incorrect. 3. Check for: (i) clogged filter; (ii) recirculation pump not operative; (iii) kink or obstruction in recirculation line. 4. Check exposing unit in phototypesetter. 5. Add replenisher without running paper or film until condition is corrected. Increase replenishment rate. 6. Trace replenishment tank lines to processor. Look for trapped air or other blockage. 7. Replenish without running paper or film until proper activity is restored. 8. Mix only a 3-day supply at any one time. Use floating lid in replenisher storage tanks. Be careful not to overmix or aerate when mixing chemicals. 9. Dump and remix. The smell of ammonia in developer section indicates contamination. 10. Verify with different emulsion number
<p>Increase in Density. (Increase in developer activity or speed. Applies to film processing). Characteristics: • Line work is plugged. • Too much overall density.</p>	<ol style="list-style-type: none"> 1. Increased development time. 2. Increased development temperature 3. Over exposure. 	<ol style="list-style-type: none"> 1. Check speed control. Check development time with stop watch and correct transport speed if the timing is inaccurate. 2. Check temperature setting and verify temperature gauge with independent thermometer. 3. Check exposure.
<p>Increase of character size and loss of edge sharpness.</p>	<ol style="list-style-type: none"> 1. Over exposure. 	<ol style="list-style-type: none"> 1. Reduce exposure.

TROUBLE SHOOTING GUIDE

problem	probable cause (s)	correction
Excessive foam in processor tank.	1. Air leak.	1. Check system for air leaks. Tighten all fittings and bleed air from lines.
Paper wrap-around.	1. Improper fold. 2. Buildup on transport and squeegee rollers.	1. Check with machine and paper manufacturers for proper fold. 2. Buildup on rollers can only be controlled by establishing a daily cleaning program.
Emulsion not drying, or tacky.	1. Dry temperature too low.	1. Increase setting. Verify gauge or setting with independent thermometer. 2. Replace fixer.
Dichroic stain. (Wavy non-uniform pattern. Gold to brown on paper, usually bluish-green on film (2 colors).)	1. Usually caused by too high a silver content in the fixer combined with excessive developer carryover.	1. a) Increase fixer replenishment rate. b) Increase fixer concentration. c) Increase developer dilution with one more part of water. d) Check pressure of squeegee rollers (if present).
Fogged film or paper, (Grey to black background on paper or in clear areas on film).	1. Light leaks in cassettes, dark rooms, or equipment. 2. Chemical fog due to over development.	1. Check all possibilities. 2. a) Decrease development time. b) Decrease development temperature.
Yellow or pink background on paper.	1. Dye retention. 2. Insufficient fixing.	1. a) Increase fixer temperature b) Increase replenishment rate. c) Increase fixer concentration. d) Increase fixer time.
Intermittent density, (Density variation within a roll of paper or film).	1. Voltage fluctuations. 2. Unaged emulsions (paper only).	1. Check exposure equipment. 2. Paper needs to be aged for a specific period. Check with manufacturer.

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