Developing Colour Film with Rollei's Digibase Kits

The process colour film seems only a bit little more complicated than black and white and the Rollei / Digibase chemicals have the advantage of being useable at an easy to maintain 25°C.

Most of the information can be found in the Rollei/Compard Digibase C-41 Processing Kit Instruction Guide [PDF]

Mixing the Chemicals

The 500 ml capacity that is most useful to me (I usually process either a single 120 or two 35mm rolls at a time in a Paterson tank) is not included in the Rollei instructions. 460 ml and 480 ml are there but 500 ml is nowhere to be found. I worked out the 500 ml solution by halving the 1000 ml concentrations listed in the instructions.

For 500 ml I used half of all the developer solution and bleach (which is a bright algae green in concentrate), 34's of the fixer and *all* of the stabilizer. The 50 ml of stabilizer included in the kit will **only** make a 500 ml working solution. You'd need 100 ml to make 1 liter of working solution. (The 500 ml working solution will work for 30 rolls, which is more than the developer should last anyway...)

Note that the water temperature needs to be at 49°C for proper mixing of the chemicals. I used a kettle to bring the water up to temperature and had my mixing graduates in a water bath at roughly 50°C to maintain temperature while mixing.

Developer

Working Solution	Water	Part A	Part B	Part C	Starter	Film Capacity*
300 ml	207 ml	30 ml	30 ml	30 ml	3 ml	4 -6 rolls
500 ml	345 ml	50 ml	50 ml	50 ml	5 ml	7 – 11 rolls
1000 ml	690 ml	100 ml	100 ml	100 ml	10 ml	12-20 rolls

^{* 35}mm, 36 exposure or 120 format rolls

Bleach

Water	Bleach	Film Capacity*
216 ml	84 ml	6-9 rolls
360 ml	140 ml	10-19 rolls
720 ml	280 ml	20-28 rolls
	216 ml 360 ml	216 ml 84 ml 360 ml 140 ml

^{* 35}mm, 36 exposure or 120 format rolls

Fixer

Working Solution	Water	Fixer	Film Capacity*
300 ml	240 ml	60 ml	6-9 rolls
500 ml	400 ml	100 ml	10-19 rolls
1000 ml	800 ml	200 ml	20 - 28 rolls

^{* 35}mm, 36 exposure or 120 format rolls

Stabilizer

Working Solution	Water	Stabilizer	Film Capacity*
300 ml	270 ml	30 ml	18 rolls
500 ml	450 ml	50 ml	30 rolls
1000 ml	900 ml	100 ml	60 rolls

^{* 35}mm, 36 exposure or 120 format rolls

The Developing Process

The processing order is $\mathbf{Pre\text{-}Soak} \to \mathbf{Developer} \to \mathbf{Bleach} \to \mathbf{Wash} \to \mathbf{Fixer} \to \mathbf{Stabilizer}$

Development can be done at a range of temperatures with this kit and several are provided in the instructions.

The temperatures I've tried so far are the "rapid" at 45°C and the lower one at 25°C. The lower temperature is easier to maintain but time to develop takes 33½ minutes versus 11½ minutes when done at 45°C.

Pre-Soak		
Temperature	Time	Agitation
25°C	3 min	15 seconds of continuous agitation at start, then 1 agitation every 30
45°C	2 min	seconds thereafter
Developer		
Temperature	Time	Agitation
25°C	13 min	Agitate once every 30 seconds
45°C	2 min	15 seconds of continuous agitation at start, then 1 agitation every 30 seconds thereafter
Bleach		
Temperature	Time	Agitation
25°C	6 min	Agitate once every 30 seconds
45°C	2 min	15 seconds of continuous agitation at start, then 1 agitation every 30 seconds thereafter
Wash		
Temperature	Time	Agitation
25°C	3 min	15 seconds of continuous agitation at start, then 1 agitation every 30
45°C	2 min	seconds thereafter
Fixer		
Temperature	Time	Agitation
25°C	7 min	Agitate once every 30 seconds
45°C	2 min 30 sec	Agriate once every 30 seconds
Stabilizer		
Temperature	Time	Agitation
25°C	1 min 30 sec	Agitate once every 30 seconds
40°C	1 min	15 seconds of continuous agitation at start, then 1 agitation every 30 seconds thereafter

Source:

http://astroturtle.com/wp/2011/04/rollei-compard-digibase-c-41-processing-kit/