

PRODUCT INFORMATION

RA-4 CD-R 160 Colour Developer Replenisher *Professional Plus*

RA-4 CD-R 160 PRO Plus is a professional 2-Part colour developer for processing RA-4 compatible colour papers like DP2, Maxima and others in machines such as Polielettronica, Theta, Chromira.

RA-4 CD-R 160 PRO Plus	Pack with 5 L Part A and 5 L Part B for 50 L replenisher for 312 m ²	REF 12510
RA-4 CD-S	Colour Developer Starter, 2 L concentrate for 80 L working solution	REF 12810
CD-Additiv Plus	Antioxidant, 2 x 0.5 L concentrate for 250-500 L	REF 16222

The professional formula CD-R 160 PRO Plus meets the highest demands of users, when processing RA-4 compatible professional papers with extra high silver content, such as Maxima, DP2. CD-R 160 PRO Plus supplies deep blacks and clean whites - at the same time, the formula is characterised by extraordinarily high stability, even with fluctuating utilisation. Processing temperature is **35°C**.





Colour Developer Starter CD-S is required, when colour developer working solution is to be prepared fresh.

CD-Additiv Plus is an optional antioxidant. It protects the colour developer from premature oxidation at low workloads.

STORAGE

RA-4 CD-R 160 Pro Plus concentrates should be stored dry, frost-proof and out of the reach of children. The maximum temperature range is between 5°C and 25°C. Storage temperatures between 10°C and 20°C are ideal.

MIXING OF REPLENISHER

Water	CD-R PRO Plus	CD-R PRO Plus	Replenisher
	A 	B 	
800 ml	100 ml	100 ml	1 L
40 L	5 L	5 L	50 L
80 L	10 L	10 L	100 L

Warm water (> 25 °C) promotes fast and good mixing.

Mixing time: approx. 1-2 minutes. Only as much replenisher should be prepared, as will be used up within 1-2 weeks. The tank must be covered and protected from access of air.

OPTIONAL USE OF CD-ADDITIV PLUS

Addition of CD-Additiv Plus:





One time after mixing of replenisher as well as weekly directly to the working solution.

Replenisher: 4 ml CD-Additiv Plus per litre of CD-R 160 Pro Plus, one-time after mixing

Working solution: 2 ml CD-Additiv Plus per litre of CD-R 160 Pro Plus, once per week

MIXING OF WORKING SOLUTION

Mixing of working solution is required when the working tank of the machine is to be refilled, e.g. when installing a machine or after cleaning the tank during maintenance work.

Water > 25 °C	Starter CD-S	CD-R 160 PRO Plus Replenisher	Working solution
			
275 ml	25 ml	700 ml	1 L

Corresponding to the size of the respective colour developer working tank, the quantities for water, Starter CD-S and CD-R 160 Pro Plus replenisher are to be multiplied.

Start mixing with the full amount of water, then add Starter CD-S and replenisher. Mixing time approx. 1-2 minutes.

PROCESSING PARAMETERS

Time: 45 s **Temperature:** 35°C ± 0,3°C **Replenishment rate:** 160 ml/m²

The data given are guideline values that may deviate in practice, depending on the individual developing machine used, on the type of colour paper and on the utilisation. The specifications for time and temperature should not be undercut; slightly longer time or higher temperature is possible.

Tempered working solution is subject to continuous evaporation of water. Accordingly, the evaporation should be compensated for by a daily addition of water to avoid an increase in the concentration of the working solution. The daily addition of water to the working solution is approx. 0.5 % of the tank volume - e.g. for a tank with 20 litres tank capacity, the daily addition is approx. 100 ml.

Any tempering has a stressing effect on the shelf life of the chemicals, therefore the processor should be switched off immediately after the end of work, the timer should be programmed accordingly.

OCCUPATIONAL SAFETY

Handling of photographic chemicals is safe, if used properly and protective measures are followed. Hazard and precautionary information can be found on the label (H and P phrases, hazard symbol) and in the safety data sheet. Personal protective equipment should include safety goggles or face shield, protective gloves and a lab coat or apron.

SHELF LIFE

RA-4 CD-R 160 Pro Plus concentrates in unopened, originally sealed bottles and canisters have a shelf life of approx. 2 years.

DISPOSAL

Photographic chemicals - concentrates or used baths - must not be discharged into the public sewer system. These chemicals must be discarded by commercial waste treatment companies, who properly treat and dispose of in accordance with legal regulations. Further information can be found in the safety data sheet.