

PRODUCT INFORMATION

C-41 CD-R RTU Colour Developer Replenisher *Ready-to-use*

C-41 CD-R RTU is a ready-to-use 1-part Colour Developer with standard replenishment rate, designed for the development of C-41 compatible colour negative films in minilabs and rack & tank processors.

C-41 CD-R RTU	Ready-to-use replenisher, 2 x 5 L	for 222 films 135-24	REF 13210
C-41 CD-S	Colour Developer Starter, 1 L conc.	for 50 L working solution	REF 13220
CD-Additiv Plus	Antioxidant, 2 x 0.5 L conc.	for 250-500 L	REF 16222

The ready-to-use solution CD-R RTU is particularly easy and safe in use: no efforts for the preparation of chemicals - potential mixing errors are excluded. The developer is equipped with an advanced formula that ensures a very high process stability even under low workload conditions.

Colour Developer Starter CD-S is required for the preparation of working solution.

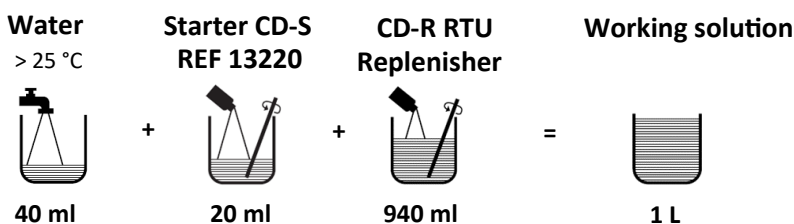
CD-Additive Plus is an Antioxidant, to be applied optionally. It prevents premature oxidation of the Colour Developer at low workload.

MIXING OF REPLENISHER

The solution is ready to use, it can be refilled directly into the replenisher tank.

MIXING OF WORKING SOLUTION

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



Mixing can either be done in an external mixing vessel or just simply in the working tank of the machine. Mixing in the working tank is gentle and safe - it minimizes impact of oxygen, thus impairances by oxidation. Precondition for mixing in the working tank is knowledge of exact working tank volume.

Corresponding to the size of the respective Colour Developer working tank, the quantities for water, Starter CD-S and Replenisher CD-R RTU are to be multiplied.

Fill the calculated amount of water into the empty tank, then add required Starter CD-S and top up with Replenisher CD-R RTU. The circulation in the working tank ensures the necessary mixing of the working solution.

Warm water favours fast and good mixing of the components and shortens the heating-up time before starting the processor.

OPTIONAL ADDITION OF CD-ADDITIV PLUS

Replenisher tank: 4 ml CD-Additiv Plus per litre, after each refilling of replenisher

Working tank: 2 ml CD-Additiv Plus per litre, one time a week

PROCESSING PARAMETERS

Time: 3:15 s **Temperature:** 38°C ± 0,2°C **Replenishment rates:** 45 ml/135-24 40 ml/meter film 135
66 ml/135-36 90 ml/meter film 120
75 ml/120

The data given are guideline values that may deviate in practice, depending on the individual developing machine used, on the type of films and on the workload.

Tempered working solutions are subject to a continuous evaporation of water. Accordingly, the evaporation should be compensated by a daily addition of water to the working solution in order to avoid an increase in the concentration. Top up the tank with water up to the overflow level, every day before starting work.

Under low workload conditions it is recommended to switch off any automatic water compensation, too much dilution and thus a weakening of the working solution could otherwise be the result.

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.

TANK CLEANING

Cleaning of Colour Developer tank and rack, e.g. after maintenance work should only be carried out with specially designed cleaners, e.g. Calbe Lab Cleaner REF 16460. After cleaning, a multiple thorough rinsing with water is essentially required to ensure the entire removal of any residues of the cleaner.

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.

STORAGE

C-41 CD-R RTU 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.

SHELF LIFE

C-41 CD-R RTU solution s in unopened, originally sealed canisters has a shelf life of approx. 1 year.

DISPOSAL

Photographic chemicals - concentrates or used baths - must not be discharged into the public sewerage 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.