ADOX C-TEC 3-BATH E-6 DEVELOPING KIT TO MAKE 1 LITER



ADOX C-TEC E-6 is a standardized E-6 processing kit for all color slide films. It is easy to use and produces professionally developed films, as if you had them processed in your favorite lab—only much faster 😊

With this kit, you can develop up to 12 35mm or medium format films.

Color development is not much more complicated than black and white development.
Once the film is loaded in the tank, the rest of the process can take place in daylight.
The C-TEC E-6 kit works with only three baths (plus a stabilizing bath, which also serves as a wetting agent).
Reversal exposure occurs chemically and is incorporated into the color developer.

You only need three baths: the first developer, the color developer, and the bleach-fix bath. In between, there are rinsing steps, but these are also present in black-and-white development.

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You just need to ensure that the two development steps (first developer and color developer) are precisely temperature-controlled.
A rotary processor with a temperature-controlled water bath is the best choice, but you can also simply temper a developing tank in a water bath.
Make sure that the water bath is either temperature-regulated (e.g., with a sous-vide stick) or large enough to maintain the temperature for about 15 minutes.
Once the color development is complete, the temperature is no longer as critical.

Now let's start by mixing the chemicals.
In your C-TEC E-6 box, you'll find six bottles, each containing 200 ml, carefully packaged by our production team.

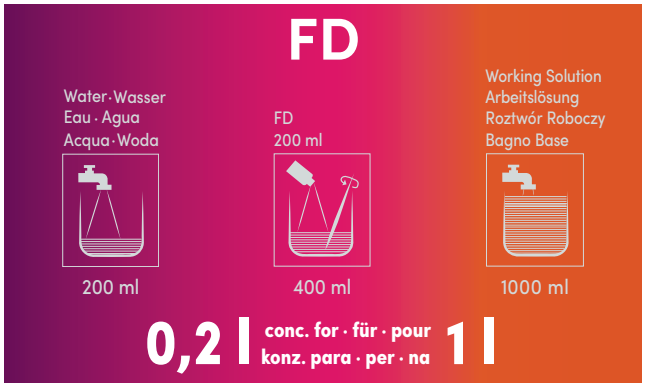
- First Developer FD (1-Part) 200 ml conc.
- Color Developer CD Part 1 200 ml conc.
- Color Developer CD Part 2 200 ml conc.
- Bleach-Fix BX Part 1 200 ml conc.
- Bleach-Fix BX Part 2 200 ml conc.
- Stabilizing Bath STAB (1-Part) 200 ml conc.

From these six bottles, you'll prepare the three required processing baths as well as the stabilizing bath:

- The **First Developer (FD)**, which you mix from the first bottle.
- The **Color Developer (CD)**, which you mix from the next two bottles.
- The combined **Bleach-Fix Bath (BX)**, which you mix from the two BX bottles.
- And finally, the **Stabilizing Bath (STAB)**, which is prepared from the last bottle.

The reason we sell individual bottles is due to their increased shelf life.

Mixing of the first developer FD

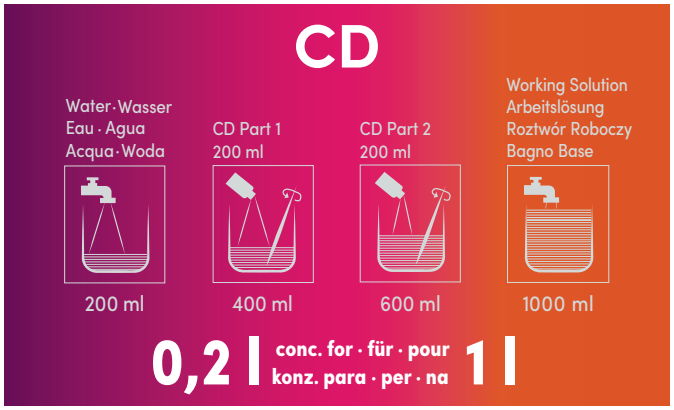


The first developer should always be prepared first. Immediately seal the bottle with the working solution after mixing to prevent any contamination of the first developer by the color developer or its fumes.

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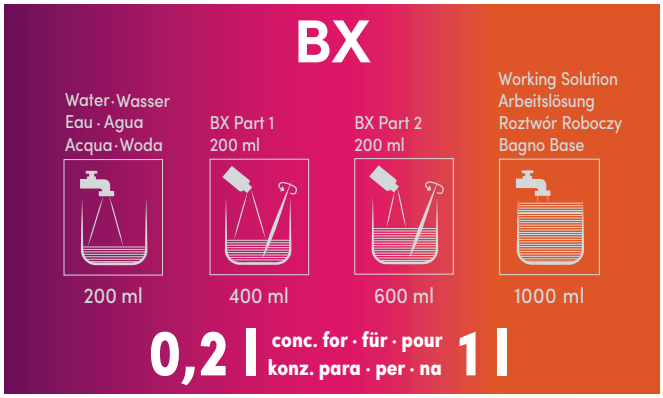
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Mixing of the first developer CD



Freshly mixed color developer working solution is violet in color; after some time, it will turn yellowish.

Mixing of the bleach-fixer BX



Mixing of the stabilizer



For preparing the stabilizing bath, demineralized water should be used.

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Partial mixing for one-shot development

For E-6, one-shot development with fresh chemicals is recommended without extension factors. The following table provides the fill quantities for Jobo tanks (250 ml) and Paterson tanks (330 ml). With each preparation, you can develop two films consecutively. Please note that the total usage of the kit may vary accordingly.

	Water	Part 1	Part 2		Final
First developer FD	200ml	50ml			250ml
	264ml	66ml			330ml
Color developer CD	150ml	50ml	50ml		250ml
	198ml	66ml	66ml		330ml
Bleach-Fix BX	150ml	50ml	50ml	-	250ml
	198ml	66ml	66ml	-	330ml
Stabilizer STAB	200ml	50ml	-	-	250ml
	264ml	66ml	-	-	330ml

The temperature of the mixing water can range between 20°C and 45°C. If you want to start immediately after mixing, set it approximately 10°C above your target temperature and allow the solution to cool to the desired temperature.
The standard temperature for E-6 is 38°C.
The first developer should always be prepared first. Immediately seal the bottle with the working solution after mixing to prevent any contamination of the first developer by the color developer or its fumes.
The part concentrates of the color developer must be measured precisely, as even small deviations can alter the color balance. Freshly mixed color developer working solution is violet in color; after some time, it will turn yellowish.
For preparing the stabilizing bath, demineralized water should be used.

It's best to store mixed chemicals in well-filled, amber glass bottles.

To bring the chemicals to the desired temperature, place the bottles in a water bath. Measure the target temperature in the bottle, not in the bath!

DEVELOPMENT

After mixing the chemicals and bringing them to the correct temperature, load the films into your developing tank.

We recommend developing no more than two films at once in a tank to avoid cross-contamination.
Now we can start. In the first step, fill the tank containing the film with water from the temperature-controlled bath to preheat the film and tank.
When you pour out the water (after about 2 minutes), it may be discolored. This is just the anti-halo layer washing off.
Don’t be alarmed—keep going with confidence! :-)

Next, pour the **First Developer (FD)** into the tank. Tap the tank flat on a stable surface (like a table) to remove any air bubbles from the film surface.

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Now, gently invert the tank for 30 seconds. Alternatively, you can let your rotary processor rotate at a slow or medium setting.
After each inversion, the tank should be returned to the temperature bath. For the first 30 seconds, it's best to invert under water, then continue with one gentle inversion every 15 seconds.
The water bath must be temperature-controlled (e.g., with a sous-vide stick or the Cinestill TC100) or simply large enough to maintain the temperature throughout the development time (e.g., 29–30°C) using a large plastic bin from the hardware store.
Repeat the inversion rhythm during both the color development and bleach bath stages.

Developing steps	°C	Toler.	Min
Preheat tank, film, and reel	38°C	± 0,5°	2' 00"
First Development FD (follow exact timing!)	38°C	± 0,3°	**6' 15"**
Rinse with warm water	38°C	± 5°	2' 30"
Color Development CD	38°C	± 2°	**6' 00"**
Rinse with warm water	33-39°C		2' 30"
Bleach-Fix Bath BX	20-40°C		**6' 00"**
Final wash	33-39°C		4' 00"
Stabilizer (STAB)	20-39°C		1' 00"

All times are given in minutes' seconds'' and are based on a process temperature of 38°C. The specified times start from the film's first contact with a bath or rinse until its first contact with the following bath or rinse. Therefore, the pouring-out time still counts as part of the previous bath.
The first development time is especially critical, and the times must be followed precisely.

After the first film, you'll need to extend the development time to compensate for the reduced activity of the partially depleted chemicals.
Use the following tables for this purpose.

Refer to the following table if you have prepared 500 ml of working solution. You can prepare two batches of 500 ml, allowing you to develop up to 12 films.

	Film 1+2	Film 3+4	Film 5+6
ErstentFirst developer FD	**6' 15"**	**6' 30''**	**6' 45''**
Color developer CD	**6' 00"**	**7' 00''**	**8' 00''**
Bleach-Fix Bath BX	**6' 00"**	**7' 00''**	**8' 00''**

All times are given in minutes' seconds'' and are based on a process temperature of 38°C. The specified times start from the film's first contact with a bath or rinse until its first contact with the following bath or rinse. Therefore, the pouring-out time still counts as part of the previous bath.
The first development time is especially critical, and the times must be followed precisely.
After the bleach-fix bath, the development tank can be opened—both the final rinse and the stabilizing bath can be done in daylight.
For rinsing, use running water or change the water every 30 seconds (Ilford method), always keeping the tank filled. After the stabilizing bath, remove the wet film from the reel, gently wipe it, and hang it up to dry (max. 45°C) in an area as dust-free as possible.

Use the following table for development if you have prepared 1,000 ml of working solution directly.

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	Film 1-4	Film 5-8	Film 9-12
ErstentFirst developer FD	6' 15"	6' 30''	6' 45''
Color developer CD	6' 00"	7' 00''	8' 00''
Bleach-Fix Bath BX	6' 00"	7' 00''	8' 00''

All times are given in minutes' seconds'' and are based on a process temperature of 38°C. The specified times start from the film's first contact with a bath or rinse until its first contact with the following bath or rinse. Therefore, the pouring-out time still counts as part of the previous bath.
The first development time is especially critical, and the times must be followed precisely.
After the bleach-fix bath, the development tank can be opened—both the final rinse and the stabilizing bath can be done in daylight.
For rinsing, use running water or change the water every 30 seconds (Ilford method), always keeping the tank filled. After the stabilizing bath, remove the wet film from the reel, gently wipe it, and hang it up to dry (max. 45°C) in an area as dust-free as possible.

PUSH OR PULL

To achieve the best possible quality, films should be exposed as accurately as possible according to the manufacturer's specifications. Slides are final results and cannot be edited digitally or in the darkroom. Underexposed or overexposed slide films can be corrected—within limits—by modifying the first development. This requires adjusting the time and/or temperature of the first developer. Generally, both pushing (increasing sensitivity) and pulling (decreasing sensitivity) are compromises in terms of development quality. However, these methods may be necessary to balance scene contrasts (harsh light = pull, very soft light = push).

		FD Timechange
2 stops underexposed	Push + 2	+ 5' 30''
1 stop underexposed	Push + 1	+ 2' 00''
1 stop overexposed	Pull -1	- 2' 00''
2 stops overexposed	Pull -2	FD Zeit unverändert, FD Temperatur auf 31°C

The specified correction values are to be added to the FD time for push processing and subtracted for pull processing.
The recommended corrections are guidelines and apply only to the first developer; the other processing baths remain unchanged.
Pushing films puts more strain on the first developer than normal processing, so its capacity is correspondingly lower than in standard development.
First developer capacity per 500 ml: 4 films (135-36) at Push 1; 3 films (135-36) at Push 2.
Underexposed and overdeveloped films show higher contrast with reduced maximum density (blackening). Overexposed and underdeveloped films show lower contrast. In both cases, shifts in color balance may occur. Rule of thumb: the greater the deviation from the standard process, the greater the quality loss.

STORAGE AND SHELVE LIFE

C-TEC kits should be stored in a dry, frost-free place and kept out of reach of children. The maximum temperature range is between 5°C and 30°C, with ideal storage temperatures between 10°C and 20°C.

STORAGE	Fesh Working Solution	Used Working Solution	Opened Concentrates
First Developer FD	8 weeks	2 weeks	24 weeks
Color Developer CD	12 weeks	6 weeks	24 weeks
Bleach-Fix BX	12 weeks	12 weeks	24 weeks
Stabilizer STAB	12 weeks	6 weeks	24 weeks

Unopened, originally sealed C-TEC kit bottles have a shelf life of approximately 2 years. Opened concentrates can be protected from premature oxidation by squeezing plastic bottles to remove excess air or by adding glass marbles to glass bottles. Store working solutions in fully filled bottles.

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TROUBLESHOOTING

Result	Possible cause	Action to be taken
Slides to light	Overexposure FD temperature too high FD time too long FD agitation too intense Contamination of FD with BX	Check light meter Reduce temperature Reduce FD time in increments of 15–30 seconds Reduce agitation Prepare a new batch of FD, clean equipment
Slides to dark	Underexposure FD temperature too low Tank not preheated FD time too short FD agitation too weak	Kameraeinstellungen prüfen Temperatur erhöhen Dose vorwärmen FD Zeit in Stufen von 15-30 s verlängern FD Bewegung intensivieren
Maximum density of slides (blacks) appears green	Contamination of FD or CD with stabilizing bath .	Thoroughly clean the tank and reel after each development.
Maximum density of slides is gray instead of black, with reddish-brown to greenish tones	Contamination of FD with CD	Prepare a new batch of FD, clean equipment thoroughly. Follow processing instructions carefully!
Uneven color areas, streaks, and/or color blotches	Insufficient agitation, uneven temperature control. Processor is not level.	Pour chemicals more quickly, especially the FD. Level the processor. Increase agitation.
Whitish spots on the dry film.	Limescale spots; mixing water is too hard.	In the future, prepare the stabilizing bath with 1/3 tap water and 2/3 demineralized (boiled) water. Re-bathe films in this solution.

SAFETY

When handling this product, follow the standard safety precautions for working with chemicals. Avoid contact with skin and eyes, and do not ingest the Bleach Fix BX. This product must, of course, be kept out of reach of children and stored separately from food items. All storage containers must be clearly labeled.
Do not use containers that are typically used for food storage to store chemicals.

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DISPOSAL

Photochemicals must not be disposed of in public sewage systems. Unused or no longer usable photochemicals must be taken to local collection points or recycling centers, where they will be disposed of in accordance with legal regulations.

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