

New Info: Pushing with SPUR Omega X

With SPUR Omega X, it is possible to push by one f-stop while retaining the tonal values completely and the other quality characteristics such as low graininess and high sharpness very well. With a few exceptions (e.g. Ferrania P 30, which has too steep highlights even with normal development), the density graph corresponds to that at nominal speed with the exception of shadow details, which are naturally somewhat reduced with most emulsions. Good shadow detail can be found with some emulsions such as Ferrania P 33, Fomapan 100, Ilford FP4+ and Ilford Delta 400. Satisfactory shadow detail can still be found with Ilford Delta 100, Ilford Ortho Plus, ADOX CHS 100 II and Agfaphoto APX 100 (Kentmere 100).

The Fomapan 400 is difficult to push, with a sensitivity gain of only one DIN (one third f-stop), while the Fomapan 200 and Fomapan 100 have a full f-stop gain. Pushing is carried out at a higher developer filling temperature, normally 25° C, and for most emulsions the other development parameters such as dilution and development time are maintained. Deviations from this are listed in the push table.

Important: All temperature specifications in the push table represent the filling temperature of the working solution. It is not necessary to keep this temperature constant (e.g. in a warm water bath) during development; on the contrary, it would falsify the results. It is only necessary to ensure that development takes place in a room with a normal room temperature of approx. 20° to 21° C.

If development takes place in summer at higher room temperatures, the development time must be reduced accordingly. It should be noted that the higher the room temperature and the higher the filling temperature, the longer the development time needs to be reduced.

Pushing Table

Manufacturer/Film	Film Speed ISO	Dilution Overall	Developing temp. Fill in	Developing Time (min)	Kipprhythmus Inversion Tact
ADOX CHS 100 II	160/23°	1 + 13	25° C	13,5	2x je min; twice each min
ADOX Silvermax	160/23°	1 + 15	25° C	13,5	1x je min; once each min
ADOX HR 50 Speed Boost	100/21°	1 + 18	25° C	12	1x je min; once each min
Agfaphoto APX 100	200/24°	1 + 18	25° C	12	1x je min; once each min
Agfaphoto APX 400	800/30°	1 + 10	25° C	15	2x je min; twice each min
Ferrania P 30	50/18°	1 + 18	25° C	12	1x je min; once each min
Ferrania P 33	320/26°	1 + 15	25° C	15	1x je min; once each min
Fomapan 100	160/23°	1 + 18	25° C	12	1x je min; once each min
Fomapan 200	320/26°	1 + 15	25° C	13	1x je min; once each min
Fomapan 400	400/27°	1 + 10	25° C	15	2x je min; twice each min
FOTOIMPEX CHM 100	200/24°	1 + 18	25° C	12	1x je min; once each min
FOTOIMPEX CHM 400	800/30°	1 + 10	25° C	15	2x je min; twice each min
Fuji Acros 100 II	200/24°	1 + 16	26° C	14	2x je min; once each min
Ilford Pan F +	80/20°	1 + 20	25° C	13	1x je min; once each min
Ilford FP4 +	250/25°	1 + 19	25° C	13	1x je min; once each min
Ilford HP5 +	800/30°	1 + 14	25° C	15	1x je min; once each min
Ilford Delta 100	200/24°	1 + 20	25° C	12,5	1x je min; once each min
Ilford Delta 400	800/30°	1 + 13	25° C	15	1x je min; once each min
Ilford Ortho Plus	250/25°	1 + 16	25° C	14	1x je min; once each min
Kentmere 100	200/24°	1 + 18	25° C	12	1x je min; once each min
Kentmere 400	800/30°	1 + 10	25° C	15	2x je min; twice each min
Kodak Tmax 100	160/23°	1 + 15	24° C	13	1x je min; once each min
Kodak Tmax 400	800/30°	1 + 16	25° C	14,5	1x je min; once each min
Kodak Tri X	800/30°	1 + 12	25° C	15	1x je min; once each min
Kodak Double X	800/30°	1 + 12	25° C	14,5	1x je min; once each min
Lomography Potsdam 100	160/23°	1 + 16	25° C	13	1x je min; once each min
Orwo UN 54	160/23°	1 + 16	25° C	13,5	1x je min; once each min
Orwo NP 100	200/24°	1 + 13	25° C	14	1x je min; once each min
Rollei RPX 25	50/18°	1 + 20	25° C	11	1x je min; once each min
Rollei RPX 100	200/24°	1 + 14	25° C	10,5	1x je min; once each min
Rollei RPX 400	800/30°	1 + 10	25° C	15	2x je min; twice each min
Rollei Retro 80 S	80/20°	1 + 18	25° C	10,5	1x je min; once each min
Rollei Superpan 200	160/23°	1 + 10	25° C	10,5	1x je min; once each min
Rollei Infrared	160/23°	1 + 10	25° C	10,5	1x je min; once each min
Rollei Ortho 25 Plus	250/25°	1 + 15	25° C	13	1x je min; once each min

This information can now also be found in the new data sheet!