

**DATA SHEET**



**S**peed **P**hotography  
+  
**U**ltrahigh **R**esolution

**SPUR Photochemie**

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## **Data Sheet for SPUR NHC**

SPUR NHC is a new, innovative high contrast developer for black-and-white negative films. Its area of application are the development of subjects with low or very low subject contrast (in the woods, at twilight, in foggy weather etc.) and the realisation of graphic effects with reduced tonal values with normal or higher subject contrast.

The developer stands out by the following features: extremely high sharpness as well as high resolving power in conjunction with rather fine grain considering the contrast attained. Speed yield is at least box speed or one f stop more depending on the contrast attained. Exposure latitude is very large in view of the high contrast.

Due to careful coordination of those features of the developer that have an effect on the suitability of the developed negative for scanning, negatives developed in NHC are easily scanned. The sample photos on our website are raw scans, i.e. those samples have never been subject to digital image processing except perhaps a slight optimisation of brightness.

Information on processing is available from the annexed developing chart. The indicated parameters are valid for the tank development of 35 mm and roll films. The times for the tray development of sheet films as well as rotation processing must be determined by the user.

Different emulsions developed to attain the same contrast may react completely differently as far as extreme highlights are concerned. By way of example, extreme highlights are rather moderate with Kodak Tri-X and Ilford FP4+, whereas they are substantially steeper, e. g. with Ilford Pan F+ and Kodak Tmax 100.

## Developing chart SPUR NHC

The processing parameters indicated in the chart are applicable with a developing temperature of 20° C and the following inversion tact: permanently for the first 30 seconds, and then once every minute (Ilford inversion tact)

Contrast was determined by measuring the developed film direct using a densitometer, and is approximately consistent with the contrast measured using a diffusor enlarger.

Manufacturer/Film	Film Speed ISO	Dilution	Developing Time min	Contrast
Kodak Tmax 100	80/20°	1 + 15	8	fairly high (n+1)
	100/21°	1 + 15	10	high (n+2)
	125/22°	1 + 15	12	very high (n+2,5)
Kodak Tmax 400	320/26°	1 + 19	9	fairly high (n+1)
	400/27°	1 + 15	9	high (n+2)
	500/28°	1 + 15	11	very high (n+2,5)
Kodak Tri-X 400	400/27°	1 + 19	11	fairly high (n+1)
	500/28°	1 + 15	11	high (n+2)
	640/29°	1 + 15	14	very high (n+2,5)
Ilford Delta 100	100/21°	1 + 19	7.5	fairly high (n+1)
	125/22°	1 + 15	8	high (n+2)
	160/23°	1 + 15	9.5	very high (n+2,5)
Ilford Delta 400	400/27°	1 + 15	9	fairly high (n+1)
	800/30°	1 + 9	12	high (n+2)
Ilford Delta 3200	1000/31°	1 + 9	11	normal (n)
	1600/33°	1 + 9	14	fairly high (n+1)
Ilford Pan F +	50/18°	1 + 19	7.5	fairly high (n+1)
	64/19°	1 + 19	11	high (n+2)
	64/19°	1 + 15	13	very high (n+2,5)
Ilford FP4 +	160/23°	1 + 15	10	fairly high (n+1)
	200/24°	1 + 9	10	high (n+2)
	250/25°	1 + 9	12	very high (n+2,5)
Ilford HP5 +	640/29°	1 + 12	9	fairly high (n+1)
	800/30°	1 + 9	11	high (n+2)
	1000/31°	1 + 9	14	very high (n+2,5)
Fuji Neopan Acros 100	100/21°	1 + 15	8	high (n+2)
	125/22°	1 + 15	10	very high (n+2,5)
Fuji Neopan 400	400/27°	1 + 15	10	fairly high (n+1)
	800/30°	1 + 12	14	high (n+2)
Fomapan 100	100/21°	1 + 29	8	fairly high (n+1)
	125/22°	1 + 20	8	high (n+2)
	125/22°	1 + 15	12	very high (n+2,5)
Fomapan 400	320/26°	1 + 12	15	normal (n)
	400/27°	1 + 9	15	slightly increased (n+0,5)
Rollei RPX 100	200/24°	1 + 15	10	fairly high (n+1)
	200/24°	1 + 12	12	high (n+1,5)
	200/24°	1 + 9	14	high (n+2)
Rollei RPX 400	500/28°	1 + 15	8	moderately low (n-1)
	500/28°	1 + 15	10	normal (n)
	640/29°	1 + 15	14	fairly high (n+1)