



**SPUR Photochemie**  
**Dr. Heidrich + Schain GbR**  
Schmiedestr. 31, D-52379 Langerwehe  
**Tel.:** 02423-6198 **Mobile:** 0173-7086525  
**Fax:** 02423-406980  
**Web:** [www.spur-photo.com](http://www.spur-photo.com)  
**E-Mail:** [schain@spur-photo.com](mailto:schain@spur-photo.com)  
**General Manager**  
Dipl.-Ing. Heribert Schain

## **SPUR – High Quality Developers For High Quality-Branded Films**

In the past ten years, the leading film producers have steadily improved their emulsions and raised their quality to a level which was unimaginable 20 or 30 years ago. An incentive to do this was the competition with digital photography, which during the past years achieved an ever higher resolution and therefore, a very high quality.

SPUR Photochemie has been conducting groundbreaking research in the field of b/ w negative development for more than 20 years and has conceived innovative developers for the current quality-branded films enabling a maximum of picture quality, thus revealing the specific best features of those films.

Whereas analogue photographs dispose of a substantially finer tonal rendering and consequently boast a higher wealth of detail than digital photographs, the resolution of digital photographs exceeds that of modern film only if prohibitive digital cameras are used. The resolution of document copy films developed in SPUR Modular UR however has never been achieved by any digital system to date!

SPUR developers represent the state of the art of b/ w developing technique. Hereafter you will find an overview of our most popular developers.

### **1. SPUR HRX**

#### *Fine Grain Developer*

This developer has been formulated to keep grain as low as possible. Whenever fine grain and homogeneity of uniformly grey areas (the sky for instance) in the picture are considered the most important photographic task involved, SPUR HRX should be your first choice.

The usual drawbacks of classical fine-grain developers are that the speed of the film cannot be used in full and the sharpness of contours and the detail contrast are blurred by the fine grain, so there is no optimal sensation of sharpness.

While HRX cannot use the full film speed in most cases either, it differs from classical fine-grain developers inasmuch as it shows great sharpness and outstanding detail contrast. Another advantage of HRX is its superbly sophisticated tonality due to the ideal, linear gradation curve gradient. The middle tones are thus very subtly differentiated even in soft development (N-1 to N-3), thus preventing dull or flat results. HRX is therefore especially suited for gradation control and for using the Zone System.

### **2. SPUR ACUROL-N**

#### *Highly Dilutable Acutance Developer*

SPUR ACUROL-N is a highly dilutable, novel developer for black-and-white films which is primarily optimised to achieve high sharpness and finely graduated tonal values. As with all developers of this kind (e.g. the classic Rodinal formula) the picture style of the negative can be easily varied or changed by choosing different dilutions and inversion tactics.

However the features of classic developers were greatly improved by SPUR. In comparison with Rodinal not only sharpness, plasticity, fineness of grain as well as dilutability but also curve and contrast behaviour, which were considered a weakness of Rodinal (curve sagging in the middle tones, far too steep highlights) were absolutely optimised, so there is no hindrance using the Zone System.

The developing parameters indicated in the developing chart are given by reference, thus enabling very good results even for beginners. Experienced users may compile results in line with their individual artistic predilections by varying dilution, agitation, stand-developing or developing times in combination with their preferred films.

### **3. SPUR Ultraspeed Vario**

#### *Specialist Developer For Pulling and Pushing*

The SPUR Ultraspeed Vario development system is an advanced push and pull processing technique that allows for exposure and development of films with virtually any speed.

Absolutely new about this development system is that a broad variety of contrasting is available at a chosen speed. This holds true for the push band, and – to a minor extent – for the pull band of development. At a speed of ISO 25/15° the AGFAPHOTO APX 100 New, for example, offers full contrasting ranging from “normal” (N) to “extremely soft” (N – 4).

Contrast can be controlled by variation of the dilution and variation of the development times of the first and second development, respectively. The respective parameters are given in the development chart.

Conventional push and pull developers use variation of speed for contrast control; that is, the higher the chosen speed, the higher the contrast; and the lower the speed, the lower the contrast.

That is why a low speed (e.g. for an improved fineness of grain) is of no use with a low subject contrast, since the consequently low contrast would make for very poor negatives. When pushing, a high subject contrast has always been detrimental and has always led to utterly insufficient tonal values – up to now.

All these limitations are removed by the new SPUR Ultraspeed Vario technique. Compared to other developers of this kind, definition, contrast of detail and graininess are much better, too.

#### **4. SPUR SD 2525**

##### *Sharpness Developer*

This developer has been conceived primarily to achieve great sharpness and an uncommonly high contrast of detail, thereby also producing very fine grain. The order of importance is reversed as compared to HRX. This could be realized by accentuating graininess whilst maintaining the same level of fineness as with HRX.

Whereas uniformly grey areas are not being realized as homogeneously and as fine in grain as using HRX, it may on the other side serve as an advantage in the use of SD 2525 that the limitations as to the exploitation of speed are slightly less important, when the sharpness and detail contrast to be achieved are even better. With the same sharpness, SD 2525 is more fine grained than ACUROL-N. Apart from that, an uncommon plasticity is attained in some emulsions.

#### **5. SPUR SLD**

##### *High Speed Developer*

This developer is conceived primarily to optimize exploitation of speed, thereby realising the following extra conditions:

- optimized exploitation of speed and great sharpness even at a yet relatively flat gradation. In a high speed film, you would usually only achieve both at the same time with increased gradation, which will impeach tonal values.
- Thus resulting are outstanding tonal values and very good contrast control, which will also remain when pushing in some emulsions.
- An esthetic grain structure, which has to be considered relatively fine but certainly is slightly coarser than with HRX or SD 2525.
- Very great sharpness and uncommonly high detail contrast.

SLD balances contrast and works softly even with high speeds in many emulsions, which Ultraspeed Vario is only able to do in lower speeds.

#### **6. SPUR NHC**

##### *High Contrast Developer*

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.

#### **7. SPUR Modular UR New**

##### *Developing Technique For High Resolving Power Films*

For several decades, there have been various attempts developing high resolving power film material, which is commonly used for documentation purposes and microfilming, for pictorial photography as well. One reason for this was the wish to be able to realise high quality and greatly enlargeable negatives even with smaller formats, above all in the field of 35 mm photography.

Using conventional developing techniques, the use of document copy films (i.e. microfilms) in pictorial photography used to be subject to the following disadvantages: low speed, poor rendering of tonal values, insufficient exposure latitude, a smearing of the irradiation halation at high object ranges, which was inherent to the development process, a lack of reproducibility, interference with wetting agent residue, a poor impression of sharpness due to insufficient contrast of detail in low subject contrasts and/ or low scales of enlargement, low density range preventing deep blacks and clean whites,

poor shelf life etc. The majority of those problems were up to now considered to be inherent to emulsion and therefore, as impossible to correct.

As previous developing techniques for document copy films were unable to solve those problems, when using high resolving power materials despite the high resolution it was impossible to obtain reproducible results at a constant quality. Even though in individual cases outstanding results were indeed achieved, many users were disappointed and turned away from high resolution photography.

SPUR MODULAR UR New is a modular developer system for high resolution document copy films eliminating all those problems and enabling a flawless pictorial development of high resolving power films with constant results.