

**FREE REPORT**

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***Lith Printing  
Materials  
Update***

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***Updated: October 2009***

***Tim Rudman***

## Background

The last book- published up-to-date list of papers and developers suitable for Lith Printing was in my last book 'The World of Lith Printing', published in 2006. Shortly after that Forte ceased production for the second and final time. This in turn impacted on a number of other labels listed in 'The World of Lith Printing' that used Forte emulsions.

Since then there have been various other comings and goings of papers and prototypes. I initially documented these changes periodically for the 'TWOLP' website mailing list ([www.worldoflithprinting.com](http://www.worldoflithprinting.com)) and archive and as an insert for books ordered directly from me. These evolving updates became increasingly complicated as new material in them in turn became obsolete.

As the market has stabilized somewhat it would seem a good time to draw up a new list. Further changes are expected, of course, and there is reason to believe too that some good news may be coming for a change and I look forward to reporting on it through my newer mailing list at [www.timrudman.com](http://www.timrudman.com) (subscribe free online) if and when it happens.

**\* October 2009:**

*There have again been significant updates this year in several sectors affecting both papers and developers.*

*These have been published in my newsletters as they happen and those that had not already been incorporated in this new list have now been précised in this document as postscript notes in red under each relevant section.*

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## The Papers

The various criteria for choosing between the papers that work for lith printing remain as described in more detail in 'The World of Lith Printing'. Below is simply a list of those that do work, together with some of their properties.

### **Adox Fotoimpex (Berlin) - Agfa Resurrection**

Fotoimpex (Berlin) acquired the formulation rights for Agfa's **Multi Contrast Classic (FB)** and **Multi Contrast Premium (RC)** papers along with the emulsion and coating equipment. Do not confuse with Adox Fotowerke Inc. Calgary, Canada – an unrelated company who market film. Adox (Berlin) also market papers from Fotokemika in Croatia.

#### **Adox MCC 110/111/112**

Production target date is late 2008. This is an excellent quality FB paper for B&W that also responds to the lith process. My tests of first run samples last year confirmed this; although coating marks were apparent in lith (the lith process may reveal things that are not visible with conventional processing). Since then further tests and coatings have been carried out and I look forward to testing the final product. Cafe-au-lait colours, bright white base, smooth tones, less 'lithy'/gritty than some. I haven't tested with 2<sup>nd</sup> pass lith, but would expect it to be good. The RC version MCP is also awaiting production.

#### **ADOX NUANCE WARMTONE**

Fixed grade FB papers on 300g support. Grades 2 & 3. **Care:** Red safelight essential. Both grades lith print, my preference being for Gr.3. Good in LD20. If using Arista or Clayton lith developers use higher dilutions for best results.

#### **ADOX FINE PRINT VARIOTONE WARMTONE**

A newly developed warmtone paper made in co-operation with Harman Technology/Ilford and Wolfgang Moersch. A variant of Ilford's MGWT but with a bright white base. We know that base pigment can and does often affect 'lithability' and given its lineage I would expect this to be not a truly lithable paper for 'straight' lith processing, but to probably be very promising in 2<sup>nd</sup> pass lith, i.e. on redevelopment after bleaching. I have yet to sample this brand but Wolfgang informs me that it works nicely with the copper sulphate bleach in my books and high dilution lith developer.

#### ***\*Update April 09: Return of Polywarmtone?***

*Adox are also considering the possibility of resurrecting Forte's hugely popular PWT emulsion. This great paper was a major favorite for both regular and Lith printing and it would be very welcome news if it comes about. The original emulsion replicator has been purchased and refurbished. Expressions of interest are being*

*sought and a level of confirmed sales is needed to justify the investment required by Adox.*

*Read more about it and have your say here: <http://www.polywarmton.com>*

*It won't happen without support.*

## **(Bergger)**

Following the demise of Forte the new generation of Bergger paper is not well suited to lith printing. I include the name here in brackets simply to alert you to this change – and to say that they might yield results with 2<sup>nd</sup> pass lith techniques, but this remains to be tested (by me at least).

## **Foma (Czech Republic)**

Super papers for Lith and also for general printing. All papers in range will Lith print to some degree. The best are:

### **FOMATONE MG**

Reputed to be the last remaining paper containing cadmium. If so, the clock must be running for this range of outstanding papers as the Czech Republic acceded to the EEC in 2004 and EU regulations restrict the use of cadmium (as in the case of pre 1999 versions of Kentmere's Kentona). This emulsion has its own very distinctive appearance in lith with the warmest smoothest tonality by far. If that is what you want a superb range of rich colours is available: Beige, yellows, yellow-orange, peach & salmon pink, orange-browns and colour splits with green blacks on early snatch. The colour is largely controlled by dilution and snatch point. Good response to added potassium bromide and especially selenium toning, with tri-colour splits. It is available in the following forms:

### **FOMATONE MG CLASSIC 131 (GLOSSY) & 132 (MATT)**

Variable contrast FB paper on a 235g cream tinted base.

### **FOMATONE 532 11 ('NATURE 11')**

This is the replacement for 'Nature', which became unavailable when the paper base (same as Art Classic) production was discontinued. Foma have sourced a new base paper and with the same emulsion as 131 above 'Nature 11' is now on an extra heavy base and a lustre sheen finish.

### **FOMATONE MG 'CHAMOIS' 532 AND 542**

These had the same emulsion as the Classic paper but the base tint is different; the 532 Chamois being rich yellow-cream, the 542 a lighter ivory-cream. Production on this base has ceased but some supplies still exist.

### **FOMATONE MG 331 AND 332**

The same emulsion but in RC form: Glossy and s/matt finishes.

NOTE: This Fomatone emulsion is very slow, so be prepared for long exposure times.

### **FOMABROM VARIANT 111 (GLOSSY) & 112 (MATT)**

A variable contrast FB paper on a 180g base. Lithable, capable of very cold tones or with yellow-red hues.

### **FOMABROM VARIANT 1V 123**

Although I haven't yet sampled this, it has been reported to me that this new semi matte paper 'liths beautifully'.

## **Forte?**

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*Polywarmtone might make a comeback with Adox. Same emulsion, same machine, same expertise. See Adox above to see how to help make this happen.*

## **Fotokemika (Croatia)**

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### **VARYCON (KG) VC FB**

This has its followers in the lith printing community. It produces comparatively large soft clumpy grain in the emerging blacks, with sandy coloured mid and light tones. More colour can be achieved with 2-bath lith techniques &/or by toning.

### **EMAKS**

These are graded papers (Gr 2 & 3) on a 300g support with a neutral chlorobromide emulsion suitable for lith printing. They paper lith satisfactorily in LD20 but benefit from high dilutions in the newer Arista Lith and Clayton Lith developers (1+1+28 or more). K=Fibre, G= Glossy, KK = Fibre pearl, KM = Fibre matt

*IMPORTANT NOTE: A standard red safelight is essential. OC safelights or a combination of red and OC safelights may result in fogging. Do a safelight test for your own darkroom.*

## **Fotospeed (UK)**

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### **FOTOSPEED LITH**

The only dedicated Lith paper. As this is non super-coated, it accepts pencil (e.g. for signing) and carries a 'handle with care' warning. I have never experienced surface damage with my prints and only occasionally seen it at group workshops. Its slippery surface also necessitates careful handling, especially with larger heavier sheets. Coffee colours. Can be soft & delicate with 'early snatch' higher key prints, or gritty and highly 'textured' in the blacks with later snatch & low key subjects. Pinker (on dry down) with smoother blacks and lower Dmax at much higher dilutions. A good standard and its positive lith response also makes it excellent for learning.

***\*Update:** I warned in my April 09 newsletter that this paper would soon disappear and to stock up & freeze. It has now all but gone. Some stocks are still available and this last batch liths extremely well – much better than the previous batch. Worth grabbing it if you find it.*

#### **NEW FOTOSPEED LITH (\*? – see below)**

*A new lithable paper is being sourced from China. My 1st tests show a good lith response with different shadow tone characteristics, very slow paper speed. Further supplies for more extensive testing are awaited. Launch is possibly Sept/October 09.*

***\*Update October 2009:** hitches in negotiations have delayed the introduction of this paper. Future uncertain at present but efforts to find a successor continue.*

#### **FOTOSPEED BROMOIL PAPER**

Now discontinued, but as a low demand item, stocks may remain. No super-coating. It lith prints easily, giving warm sandy browns.

### **Freestyle (USA)**

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Arista is the House name for selected Freestyle branded papers. From the Arista range:

#### **ARISTA.EDU ULTRA RC VC & VC FB**

These two papers both lith print satisfactorily with cooler tones.

### **Ilford Photo (UK)**

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#### **(ILFORD MULTIGRADE WARMTONE)**

Although not my ideal for Lith printing, it will respond to dilute lith developer and I know those who like its somewhat different look, especially with higher contrast negatives. It has less interesting (or perhaps more subtle, depending on your viewpoint) results than the others listed here but yields an ivory colour with rather grudging infectious development. Better in hot lith developer or with added bromide. Recent batches appear to have a whiter base and are trickier to lith. It does however deserve special mention for 2<sup>nd</sup> pass lith - redevelopment in lith, after bleaching a conventionally processed print. Pulled at the right moment it gives a delicate blend of soft warm browns and cool greys.

Ilford have been looking at the possibility of producing a new lithable VC paper too for a while now and although there is currently no news, watch this space. I'll notify my lists when and if something materialises.

#### **NEW ILFORD LITHABLE PAPER**

***\*Update July 09:** Ilford Photo, Harman announced it will 'reverse engineer' a new fine art paper ideal for Lith printing!*



*Consultations have taken place with printers and educators as to their desired properties. Production date unknown. Potentially great news.*

*\*Update October 09: No news yet, but the project is still progressing.*

## **Kentmere (UK)**

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*Update Aug 2009: Kentona, Finegrain semi-matte VC FB base has been discontinued.*

It is now common knowledge that the Kentmere company was bought in 2007 by Harman Technology (Ilford Photo). Following the acquisition Kentmere's coating plant was closed down and future Kentmere darkroom papers will be made on the more sophisticated Ilford coating plant. These products will therefore inevitably be different. How different and whether they will lith print remains to be seen. Plans are also afoot to develop and bring to market new products to fill the gaps left by the demise of the likes of Art Classic, or Forte's Polywarmtone – a VC Art Classic perhaps? No firm news at this stage, but cautious optimism might be in order. In the meantime, significant quantities of existing Kentmere papers were made in anticipation of the move. Those of most interest to the lith printer now are:

### **KENTMERE KENTONA**

Fixed Grade. Glossy. Lith prints easily and well. Blacks may have comparatively unobtrusive fine grained texture, smooth mid and high tones. Shifts toward salmon pink (after drydown) at higher dilutions.

*April 09: Now discontinued*

### **KENTMERE FINEPRINT VC FINEGRAIN WARMTONE.**

Variable contrast, using Kentmere's unique bromo-iodide technology. Lith prints to pleasing yellow-brown hues with cold blacks that exhibit gritty grain and texture.

**Note:** Another Kentmere paper, Fineprint VC, shares the same emulsion as Fineprint VC Warmtone, but on a bright white glossy paper. However, it does not lith print. The surprising thing, given the emulsion recipe, is not that it doesn't lith print, but rather that the warm tone version does. This is thought to be because of some effect from the warmtone pigment used, which is mixed into the emulsion rather than onto the paper. The cold version Fineprint VC does however respond well to bleach and lith redevelopment after first processing in 'normal' developer ('2nd Pass Lith').

*Jan 09: The Finegrain Semi-Matte VC FB surface paper base was discontinued so the Fineprint VC FB and Warmtone papers will be changing in the future as well. I don't know what the new paper will be like exactly.*

The old favourites **Document Art** and **Art Classic** have been discontinued. Their once hoped-for replacements have for now been abandoned. (Details of which can be traced in the TWOLP news archive threads).

*\* Update April 09: Ilford are working on new paper emulsions and are hoping to produce a variable Contrast Warmtone successor to Kentona for the Kentmere label.*

*I understand that this will be a new emulsion, not a rebadge. Their production technology is different to that used by the older Kentmere factory before it closed and it may be unlikely that these papers will lith well, but they are likely to be very good of course and may well respond to 'Second Pass' lith (bleach & lith redevelopment), so the news has to be very welcome. Watch this space or my Facebook page.*

***BUT*** see later news under "Ilford" above

***\*October 2009:*** A search of suppliers shows Kentmere stocks can still be sourced, although the sizes are becoming more limited.

## **Rollei (Germany)**

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Negotiations concerning the new range of Rollei papers listed in TWOLP did not progress entirely as planned. However Maco, who own the Rollei brand, have launched 8 Foma emulsion papers under the 'Rollei Vintage' label. Foma emulsions are detailed elsewhere in this list and the warmtone version is especially suitable for lith printing & toning. This range is a permutation of fibre based, resin coated, premium weight, standard weight, warm tone and neutral tone, glossy and matt papers. They are also labelled to match the Foma coding as follows:

- Vintage 311: fb; vc; warmtone emulsion; premium weight; cream; glossy
- Vintage 312: fb; vc; warmtone emulsion; premium weight; cream; matte
- Vintage 331: rc; vc; warmtone emulsion; standard weight; cream; glossy
- Vintage 332: rc; vc; warmtone emulsion; standard weight; cream; matte
- Vintage 111: fb; vc; neutraltone emulsion; premium weight; white; glossy
- Vintage 112: fb; vc; neutraltone emulsion; premium weight; white; matte
- Vintage 311: rc; vc; neutraltone emulsion; premium weight; white; glossy
- Vintage 312: rc; vc; neutraltone emulsion; premium weight; white; matte

***\*October 2009:*** Additional papers are being added to this range in October. Details on the website at [http://macodirect.de/paper-rollei-c-1\\_17\\_185.html](http://macodirect.de/paper-rollei-c-1_17_185.html)

## **Slavich (Russia)**

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### **UNIBROM**

A cold-tone, fibre-based silver bromide emulsion, available in both single-weight (150 microns) and double-weight (250 microns) base thickness and available in Glossy & Matte surfaces, Grades 2, 3 and 4.

By far the most graphic and the coldest of all lithable papers with a look all of its own. This paper with average strength lith processing gives very high contrast

images almost like charcoal drawings. It can be the trickiest paper to control as it is prone to accelerating infectious development around the edges and often random spots and patches. This is much less in Maco Superlith\* (now Rollei Vintage Creative developer), Arista Liquid Lith\* and Clayton Lith developers, which are therefore the developers of choice with Slavich, especially in higher dilutions. Smoother tones may be obtained with redevelopment after bleaching and copper sulphate bleach (see my books) can be particularly useful.

***\*Update October 09:** Arista liquid lith and Rollei Vintage Creative lith have both changed. See below under Developers.*

## The Developers

### Fotospeed LD 20: (UK)

2 x 500ml and 5L A&B kits. Very effective for Lith printing, the smaller packs are popular with low volume users. Instructions are for use specifically with Lith printing. Since pepper fogging has largely disappeared from current papers, except in the mildest of forms, these Fotospeed packs no longer contain supplementary anti pepper fog additives.

### Freestyle Arista Liquid Lith: (USA)

Various sizes. In my limited experience this developer is better suited to lith printing than the pre-2007 version. It works particularly well in higher dilutions (from 1+1+28).

#### ARISTA PREMIUM LIQUID LITH A + B

*\*Update April 09: Arista Lith (liquid) has been discontinued and replaced with Arista Premium Liquid Lith A & B. This is made by another manufacturer and tests at Freestyle are reported to be very good at (1+24) + (1+24). It apparently works faster than the previous version. I have not yet used this new product. Arista powder lith developer is a different product and formulation and remains unchanged.*

### Maco LP-Superlith: (Germany)

**This product has now been transferred to the Rollei label (see below).**

2x500ml A&B kits. These kits also contained detailed instructions for Lith printing, for which they work very well. Depending on the desired effect try diluting higher than the recommended 1+1+12. I prefer the results at 1+1+20 or 24, but this is a matter of personal taste.

### Moersch: (Germany)

An extensive range of Lith printing kits based on formaldehyde-free lith developers. All have detailed Lith printing instructions.

#### ‘EASY LITH’

This is made with inexperienced lith printers in mind; a higher bromide (a restrainer) level facilitates easy assessment and convincing infectious development for a strong lith effect.

#### ‘SE 5 MASTER SET’

Intended for the more experienced user: 2 additional additives C and D are included, based on potassium bromide and sodium sulphite (see ‘additives’).

#### ADDITIONAL ADDITIVES

**D**, extra strong potassium bromide, **E**, for increasing grain at the expense of colour.

*\*October 2009: Additive **F** discontinued.*

*Addition of **additive Ω**. This is a second bath treatment to oxidize residual developer in the paper and intensify the colour. Contains ammonium carbonate, like one of the additives in Polychrome.*

### **‘POLYCHROME’ KIT**

This might be described as a ‘hybrid’ lith kit for creating colourful image tones with greater or lesser Lith effect. The kit consists of the lith and ‘siena’ developers as well as several additives which are used to control the final image colour. Described in ‘TWOLP’ under Two-bath lith processes.

### **Nacco Naccolith: (US)**

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This comes in a variety of sizes. In my limited experience of it (not available in the UK), this developer easily produces warm brown Lith prints, but may be more suited to those who like brown prints with less extreme ‘lithy’ properties.

### **Photographer’s Formulary Kodalith: (US)**

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Different to the discontinued Kodalith products, this is similar to the Ansco 70 formula listed below. It is probably better suited to film development (its intended purpose) than Lith printing.

### **Rollei: (Germany)**

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Maco LP-Superlith developer has now been renamed **Rollei Vintage Creative developer**. This product has now been changed – see below.

*\*October 2009: Rollei Vintage Creative (lith) developer has now been **changed**. Previously manufactured for Maco by Champion, this developer is now made by Clayton in California. Users of the previous version of Freestyle’s Arista Liquid Lith (see above) will know this developer. Works well in high dilutions and is particularly well suited to Slavich Unibrom.*

### **(Speedibrews Lithoprint): (from Silverprint, UK)**

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I have included this in parentheses, as it is not a true Lith developer. Originally formulated to circumvent the problem of pepper fogging with the old Sterling lith paper, it is a 2-part powder kit to make single solution concentrate for dilution and it requires a different technique: As there is no infectious development rush, the highlights need to be watched approaching the snatch point. It can produce very colourful toner-responsive prints with some papers. Being essentially a super-warm working developer, blacks can be a little ‘soft’ at high dilutions for maximum colour, but the 2-bath technique described in WOLP will get around this easily and effectively if required.

## Footnote

### **Current and future status:**

Products will inevitably continue to change. The last few years have seen many comings and goings and I have always striven to emphasize the positive changes as they can easily get overshadowed by the negative ones.

However, at the time of writing this latest update in October 2009 – and depending where you live – we are witnessing the lowest point in lith product availability for years, although there are indicators that this might be a temporary low point.

Supplies of Fotospeed Lith paper and most supplies of the lithable Kentmere papers are finally now drying up and will not be replaced.

Whilst in the USA supplies of the Russian Slavich papers and Varycon and Emaks from Fotokemika (Croatia) are all readily available they are not in the UK at present as far as I know.

In the UK this leaves the Foma collection as listed above. Great papers, especially the fantastic Fomatone versions, but the choice of lith effects available in the UK is currently the narrowest that I have ever known, but hopefully we will see this choice widening again in the future ...

- Ilford Photo/Harman Technology has declared its intention to produce a brand new retro-engineered fine art paper specifically for toning and lith printing. There is no information on the timetable for production yet and many unknowns still exist, but work is beginning. I will notify my list as news becomes available.
- Fotospeed are still trying to source another product from the Far East to replace their Lith paper. The timetable was planned for the launch about now but obstacles have arisen and progress has slowed down and is now uncertain, but the intention remains and when there is news I will pass it out through my newsletters.
- At least two importers in the UK have considered importing Russian and/or Croatian papers but the market is small, so as your supplies dwindle and you begin enquiring about them a supply & demand market may be stimulated – so go to it!

I hope to be able to provide updates on these and other products to everyone registered with my mailing list at my website [www.timrudman.com](http://www.timrudman.com)

As it served a common purpose, the mailing list at [www.worldoflithprinting.com](http://www.worldoflithprinting.com) has now been closed and combined with my main list so if you were on that list and haven't been receiving newsletters please re-register on [www.timrudman.com](http://www.timrudman.com) Registration to my list is free and your details will never be passed to any third party.