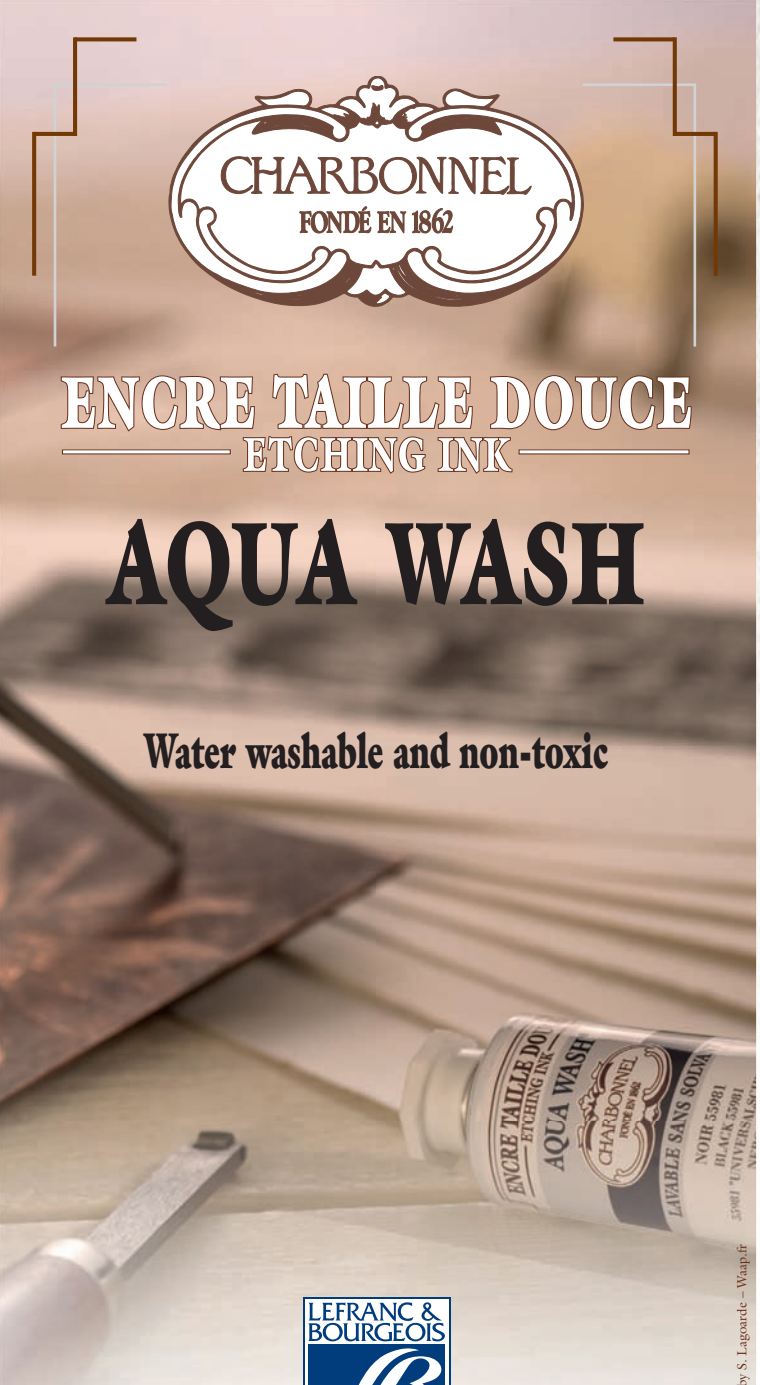
CHARBONNEL
FONDÉ EN 1862

ENCRE TAILLE DOUCE
ETCHING INK

AQUA WASH

Water washable and non-toxic



LEFRANC & BOURGEOIS
FONDÉ EN 1720

www.lefranc-bourgeois.com

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AQUA WASH



Monotype preparation by Marie Desmée

Characteristics :

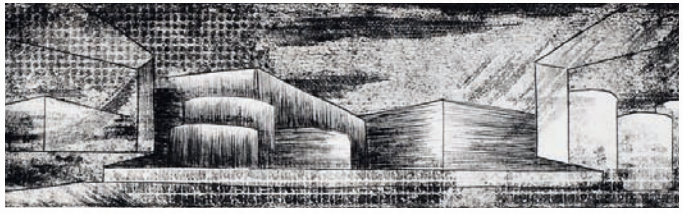
- Water-washable oil-based emulsion (contains no water)
- Hands and materials can be washed with soap and water
- High pigment concentration (comparable with standard inks)
- Extremely lightfast
- All the colours can be intermixed
- Viscous and easy to wipe
- Can be used with paper that is less damp than required for standard etching ink
- Same drying times as standard inks
- Will not soften when dry

ACMI AP Conforms to ASTM D 4236

The new AP (Approved Product) Seal identifies art materials that are safe and that are certified in a toxicological evaluation by a medical expert to contain no materials in sufficient quantities to be toxic or injurious to humans, including children, or to cause acute or chronic health problems.

A higly pigmented, non-toxic ink

The AQUA WASH range meets all the criteria for «artist» quality inks. It has a high pigmentation concentration identical to that of standard inks, and can be used in all intaglio printing techniques: such as engraving, dry-point, mezzotint, etching and aquatint, as well as monotype and relief printing techniques such as linocut and wood prints.



AQUARIUS table close-up – Michèle Lumbroso

Art schools, and an increasing number of print workshops are now searching for water washable solutions (out of a concern for safety, the environment and owing to the toxicity of solvents, recycling issues, etc.).

AQUA WASH inks are genuine oily inks for use in all techniques whether etching or relief printing. They must not be confused with water and resin based inks such as gum Arabic or cellulose-tempera based inks that can be «re-softened» and are limited to monotype or relief techniques (linocut, wood engraving).

Several years of development and Quality control

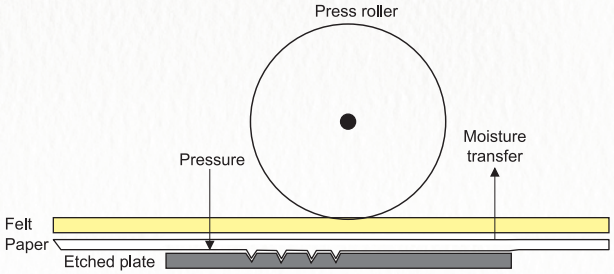
AQUA WASH ink has been developed by the LEFRANC & BOURGEOIS laboratory. Several years were required to establish the perfect stability of the colours and ensure the highest quality: a quality on which CHARBONNEL's reputation has been built.
The binder is composed of several oil emulsions. Its adhevive quality, its flexibility and its yellowing characteristics are identical to those of traditional oils. The only difference being that you can wash hands, materials and tools with... water!

Use

The **3 steps** of intaglio printing are summarised below:

- **Inking**: ink is applied directly to a previously etched plate.
- **Wiping**: the surplus ink is removed from the plate, first with a lint-free cloth (tarlatan), then with the palm of the hand. Hand wiping is the only way to obtain perfectly white areas (fully wiped and free from ink).
- **Printing**: the inked plate goes into a manual (or electric) press, the plate is positioned against thick, dampened paper so that, under pressure, the paper (slackened through dampening) draws up ink from the smallest etched details of the plate. The only precaution to take is in adjusting the dampness of the paper.

The day before: soak the paper, let it drip dry, lay the sheets flat in a stack under plastic, to preserve the core humidity.
The next day, before printing: let the excess water evacuate in the air by following the instructions below.



The right level of moisture is checked on the 1st print:

The paper must be just damp to the touch (less damp then traditional printing) while retaining good suppleness. This adjustment is essential so that the ink does not soak through the paper and stain the blankets. There is no strict timing as it depends on the type of paper and the ambient humidity.
1 - The paper is too wet when the ink's water begins to appear on the reverse side of the paper or seep straight through it.
2 - The paper is too dry when the deepest lines of the print are not reproduced.
As soon as the right level of paper dampness is achieved, the other sheets of the run should be isolated so that they do not continue to dry out (wrapping in plastic, for example).

24 colours highly pigmented

Primrose yellow
233 *** ■ serie 3 PY74

Deep yellow
179 *** ■ serie 3 PY83

Geranium red
375 *** ■ serie 3 PR48:2-PV23

Cardinal red
676 *** ■ serie 3 PR112

Vermilion red
393 *** ■ serie 3 PR188-PY74

Ultramarine
043 *** ■ serie 1 PB29

Prussian blue
046 *** ■ serie 2 PB27

Ocean blue
904 *** ■ serie 2 PB15:3

Emerald green
529 *** ■ serie 2 PG7

Payne's grey
261 *** ■ serie 1 PB29-PBk9

Basic bistre
708 *** ■ serie 2 PR101-PBk6-PY7

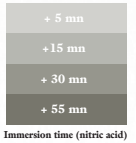
Sanguine
397 *** ■ serie 3 PR101

Raw sepia
121 *** ■ serie 1 PR101-PBk9-PBr7

Warm sepia
120 *** ■ serie 3 PB29-PBK9-PBR7

Yellow ochre
302 *** ■ serie 1 PY42

Burnt Sienna
481 *** ■ serie 1 PR101-PY42



Immersion time (nitric acid)

□ : Transparent colour
◪ : Semi opaque colour
■ : Opaque colour

*** : Extremely permanent colour
S : Price serie

LEFRANC & BOURGEOIS
FONDÉ EN 1720

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For print runs:

After several successive print runs, moisture is always transferred from the paper to the blankets. The blankets inevitably soak up water from the paper and releases it as the printing progresses. This problem must be anticipated when printing with water washable inks. A warning sign is given when the etching reaches a higher colour value or when signs of moisture are observed on the reverse side of the print (see 1 above) In this case, it is advised to reverse or change the blankets.

Cleaning

Tools must be cleaned at each stage in the printing process: the plate, colour roller, press table, work surface and naturally... your hands!
Traditional oily inks that use unprocessed or boiled linseed oil are not intrinsically toxic, but cleaning the working environment involves the use of solvents (white spirit, solvent-based products, etc.)
AQUA WASH can be cleaned using soapy water as it uses water-soluble emulsion oils. It does not contain water, so it will not rust the tools or plates (however they must be thoroughly wiped after being washed). Alcohol can effectively clean deeper etches, if necessary.

Colour chart

The colour chart has **17 colours and 7 blacks** which are familiar to the printer. These inks behave in a very similar way to standard inks with regards to hardnes, suppliness, tack and viscosity.



The ink softens rapidly when blended, when fluid it adheres perfectly to all the grooves and burrs of the plates and is very easy to wipe.

Black is the most commonly used ink. This is why the etching ink colour chart has 7 blacks.

They are differentiated by 3 criteria :

- **Viscosity, tack:** this determines the level of adhesion in the ink and its resistance to wiping.
- **Ink texture:** a supple black can envelop all the surface unevenness of fine and shallow engravings. A hard, thick black will be selected to fill deep cuts and adhere to jagged edges.
- **Shade:** blacks can either be cold or warm depending on the pigment composition. Cold blacks (with bluish tints) should not be used for printing on slightly yellow paper. Warm blacks give deeper and more contrasting prints. The weakest black is Soft Black, it is used as a medium and mixed with some blacks whose tones are considered to be too strong, so as to soften them. Its texture is very supple. It is also used to soften some blacks, thought to be too hard, so as to make wiping easier.

NB : Prussian blue and emerald green have a mineral pigment base and tend to bleed more easily in wet paper. These 2 colours cross the paper more easily and must be avoided when printing fine art books (bibliophily).

The Blacks

	Tinte	*Texture*
BLACK RSR	Strong and warm black	Viscous, powerful and supple black
BLACK 55981	Mid. Black	Very viscous, but easier to wipe than 55985:for deeply etched lines or Burin engraving
BLACK F66	Mid. Black	Low viscosity, easy to wipe
CARBON BLACK	Warmer Black	Low viscosity, easy to wipe
BLACK 55985	Cold, intense black. Reinforces the other blacks	Most viscous black, for deep etching, drypoint, burin and mezzotint
BLACK LUXE C (CARBON)	Slightly bluish black. Reinforces the other blacks	Viscous, tacky and difficult to wipe
SOFT BLACK (EASY WIPE)	Weak black. May be used for lowering the tones of a plate which is heavilye etched (engraved)	Very supple, low viscosity, easy to wipe

Mediums

Thick transparent medium

(equivalent to Transparent White Lake in the standard range) can be mixed with any colour, and increases transparency while retaining the same texture. As with the colours, this medium softens on kneading, and does not change the colour with regard to its tack and its adhesion in the grooves.



AQUA WASH oil

(equivalent to the light, oily, strong oils in the standard range) is used as a colourless thinner to render more fluid those colours that are considered to be too thick at the time of inking or wiping (the equivalent of a few drops is enough) while maintaining their viscosity. It is is also used in larger amounts (combined or not combined with water) in the monotype or photopolymer techniques, everywhere that greater fluidity is required.
This oil is the binding oil of the AQUA WASH product range.