

ITOTHERMOCHROMIC SLURRY



ITOTHERMOCHROMIC SLURRY are a range of heat sensitive colouring matter containing substances which show thermochromism, ie change colour at varying temperatures.

ITOTHERMOCHROMIC colour has a pigmenting property and the physical and chemical fastness is a function of the capsule film, whilst light fastness is related to the property of the colouring matter involved.

PROPERTIES

- **Appearance** : Coloured Paste
- **Viscosity** : Viscous
- **Consistency** : Slurry
- **Solubility** : Insoluble in water

APPLICATION

In Printing:

- **ITOTHERMOCHROMIC** : 50 – 200
- **Print Paste** : 950-800
- **ITOSILICONE LJ88** : x (as required for handle)
- **Pigment** : x - x
- **Total** : 1000
- **Mesh size** : 80 - 100 mesh
- **Pre dry** : 100°C
- **Cure** : 150°C for 4 minutes

** A high level of binder is necessary due to the relatively high pigment concentration being used.

Cont overleaf

CHARACTERISTICS

1. ITOTHERMOCHROMIC SLURRY are spherical particles approximately 5 – 30 microns in diameter. The capsule film is water insoluble, however it is possible to dissolve and to destroy this by almost all solvents (for example, alcohols, ester and ketones of low molecular weight). The capsule is subsequently destroyed and loses its colour changing action. In the same way, the capsule can also be damaged by pressure or friction.
2. ITOTHERMOCHROMIC SLURRY is safe to use as it does not directly come into contact with the skin.
3. At high temperature - low temperature the colour disappears and reappears. Therefore, if ITOTHERMOCHROMIC SLURRY are blended with general pigments a unique colour changing reaction can be obtained.
4. ITOTHERMOCHROMIC SLURRY are used for a variety of purposes for example, printing or coating garments, colouring for sponge material and pigment dyeing of garments.
5. ITOTHERMOCHROMIC SLURRY are highly concentrated dispersed pastes.
6. In the process of printing fibres (cotton, polyester, polyamide, etc), chromatic to achromatic prints can be obtained by mixing ordinary pigments.
7. Low colour fastness to light
8. Also available in a formaldehyde free capsule version, for which the maximum curing temperature is 130°C

MAGNACOLOURS[®]
IMAGINATION INK[™]



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ITOTHERMOCHROMIC SLURRY



APPLICATION (CONT)

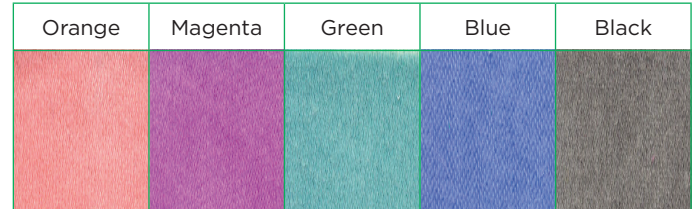
In Padding

- **ITOTHERMOCHROMIC** : 50 - 100g/l
- **ITOBINDER AG** : 50g/l
- **ITOSILICONE LJ88** : 10-20g/l (as required for handle)
- **Drying** : 100°C for 1 - 3 min.
- **Curing** : 150°C for 4 min.

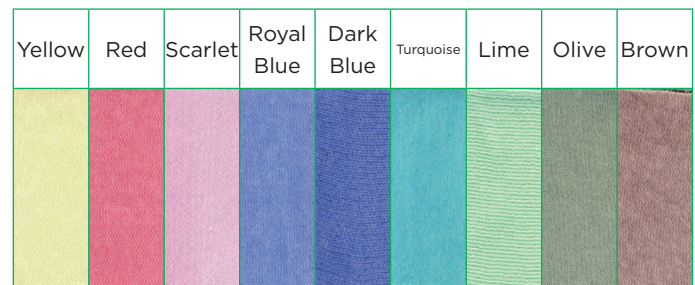
In Exhaustion

- **Set bath at 30°C with goods circulating @ a liquor ratio of 10:1**
- **Add 3% of Pre diluted ITOFIX EZF**
- **Raise to 50°C and run for 25 minutes**
- **Drain bath, fill and give a 2 minute rinse with cold water, then drain again**
- **Fill bath & raise to 50°C, add well dispersed 5-10% ITOTHERMOCHROMIC**
- **Run for 25 minutes**
- **Add well dispersed 5-8% of ITOBINDER AG (add softener as required)**
- **Run for a further 25 minutes**
- **Add softener as required in same or fresh bath.**
- **Run for a further 10 minutes if adding softener.**
- **Drain bath and unload**
- **Hydro extract goods**
- **Dry/Cure @ 150°C (temperature must not exceed 150°C)**

Standard Colours



Made to order colours



DISCLAIMER

The information herein offered is based on the best of our knowledge at present. However, we are not able to guarantee these matters, as the result of application may vary according to conditions adopted. Preliminary tests are, therefore, recommended in all cases. Please refer to MSDS regarding handling of the products.

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