



Linx ThermoChromic inks

Linx ThermoChromic inks are technically advanced inks that undergo a permanent colour change when subjected to certain wet heat conditions, such as the sterilisation processes employed in the food industry.

Canned food products need to go through a 'retort' or sterilisation process for health and safety reasons. In addition, the cans need to be coded with batch codes and 'best before' dates as part of the manufacturing process. With their ability to change colour when exposed to wet heat, Linx ThermoChromic inks are able to perform a dual role:

- Print variable information such as batch codes and dates

- Act as an easily monitored visual indicator that minimum process parameters have been met

In addition, these inks meet USDA regulations about incidental contact with meat and poultry (USA).

Although Linx ThermoChromic inks have been developed primarily for product coding in the food canning industry, they also have properties that are beneficial in other industries, such as engineering components, PVC cabling and extruded plastics. These inks show good resistance to solvent and alkalis after colour change (heating), and have the ability to penetrate and then resist removal by oily or waxy coatings and varnish.

Withstand sterilisation

Change colour with wet heat

Meet USDA requirements

Penetrate oily or waxy coatings

Excellent adhesion on a wide range of substrates

Ideal for food canning and industrial manufacturing

Product overview

Linx Thermochromic inks

Ink/solvent base	Methyl ethyl ketone (MEK)
Colour system	Dye
Colour change	Linx Thermochromic ink 1280 (purple to pink) Linx Thermochromic ink 1290 (black to blue)
Drying time	1-3 seconds
Recommended solvent	Linx solvent for thermochromic ink 1540

Please note that the colour change in thermochromic inks provides evidence of minimum processing temperature and time (115°C/240°F for 20 minutes). It does not prove that the product has either been sterilised to the standards required or cooked correctly. These factors must be proven by other means and are the responsibility of the food processor.

Quality assurance

- It is always recommended that only Linx continuous ink jet inks and solvents are used in Linx printers as substitutes can affect printer performance or cause printer failure
- Linx inks and solvents are formulated specifically for use in Linx printers to ensure performance and reliability
- They are manufactured to certified and verifiable ISO 9001 quality procedures
- Every bottle of ink and solvent is uniquely identified to ensure that it can be traced back through the manufacturing process and has a "use-by" date which guarantees performance throughout its shelf-life

Linx printers

Linx Thermochromic inks 1280 and 1290 are compatible with the current range of Linx printers fitted with Mk 7 Midi, Midi *plus*, Ultima, Ultima *plus* and Mk5 Midi (62µm) printheads. Linx Thermochromic ink 1280 is suitable for printing up to two lines of text, whilst Linx Thermochromic ink 1290 is able to support up to four lines of text. Older printers may be converted to run one of these inks – please contact Linx Customer Service or your local Linx distributor for more information.

Further information about the current range of Linx printers is available from the Linx Sales Office or at www.linxglobal.com

Ink and solvent storage and use

Linx Thermochromic inks 1280 and 1290, and 1540 solvent should be stored between +15°C and +25°C.

Linx Thermochromic inks 1280 and 1290 can be used at normal printer operating temperatures i.e. between +5°C and +45°C.

Shelf-life of Linx Thermochromic inks 1280 and 1290 is at least 12 months from the date of despatch from Linx. Shelf-life of 1540 solvent is at least 18 months from the date of despatch.

Ink handling guidelines

Linx takes great care to ensure that none of their CIJ inks and solvents are classified as 'Toxic', 'Harmful', or 'Toxic to the Environment'.

Linx Thermochromic inks 1280 and 1290 are however labelled as 'Highly Flammable' and 'Irritant'. The normal safety precautions for these classifications should always be taken.

For further details please see the Material Safety Data Sheet.

Ordering options for Linx inks and solvents

There are three alternative options to suit different customer usage patterns:

- Standard 5 litre packs (10 x 0.5 litre bottles of either ink or solvent). For customers requiring at least 5 litres of ink per year
- Easypacks (10 x 0.5 litre bottles of ink packed in 5 inner boxes each containing 2 bottles). For customers who buy centrally for onward distribution to a number of different manufacturing locations
- Combipacks (4 x 0.5 litre bottles of ink and 6 x 0.5 litre bottles of matching solvent). For customers requiring less than 5 litres of ink per year

See the [Linx range of Thermochromic inks for yourself](#). Contact our Sales Office or your local Linx distributor to arrange for a sample of your product to be printed with a [Linx Thermochromic ink](#).

Tel: 01480 302130 Fax: 01480 302116 Email: uksales@linx.co.uk

www.linxglobal.com



THINKING ALONG YOUR LINES

Linx Printing Technologies plc, Burrel Road, St Ives, Cambridgeshire PE27 3LA, UK.

Tel: +44 (0) 1480 302100 Fax: +44 (0) 1480 302116 Email: uksales@linx.co.uk Website: www.linxglobal.com

Linx is a registered trademark of Linx Printing Technologies plc