



PRISMATIC INKS

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ENVIRONMENTAL ASSESSMENT

PRISMATIC UVIMAX OFFSET INK 120xx

Raw Materials

The resins used in the manufacture of these inks are acrylate esters, which are petrochemical derivatives. At this point in time these components represent a state-of the art choice where low odour, low migration and rapid cure response are important. Alternative resins based on renewable resources do not provide the same necessary cure and odour performance. Colourants (pigments) for offset printing processes are also based upon petrochemicals and have been specifically engineered for high colour strength and print quality – colourants based upon renewable resources are generally water or solvent-soluble and are incompatible with lithographic processes as well as being tinctorially too weak for the very low film weights employed in Offset printing

All components used are free of heavy metals.

Manufacture

All UV Inks are manufactured at Prismatic Inks' Smithfield plant in Sydney. Resins, pigment dispersions and inks are all manufactured using proprietary solvent-free processes with zero atmospheric emissions.

Printing

UV Curing technology is a clean, energy efficient, solvent-free process which produces minimal emissions compared with other print processes. High Pressure mercury vapour lamps convert electricity to Ultra-Violet light with high efficiency and minimal heat. The curing process does not rely on the heating of the substrate to drive off solvent and so energy requirement is minimal. Because prismatic UV Offset Uvimax Inks are press-stable wastage and machine down time is minimal.

Recycling of Waste

Paperboard and most cellulosic substrates printed with Prismatic UV Cured inks are readily recycled. Froth flotation processes separate ink fragments from the paper which is then reused as liner or backing sheets in new printing applications.

Decomposition

Prismatic UV Offset Uvimax Ink 12011 is designed to cure to a high degree of conversion, with minimal levels of residuals with potential for migration. The resulting polymer is non-toxic and inert to the environment.