

# PRODUCT DATA SHEET

## CRYSTAL 83237

CRYSTAL	CRYSTAL is a range of solvent based surface ink for flexo and gravure printing. Typically used for coextruded polypropylene films, used for food packaging. They exhibit excellent print qualities and adhesion on modern high speed presses
PROPERTIES	Good gloss. Heat resistance - suitable for many ink-in-seal applications. Resistant towards animal and vegetable fats High slip. Good scuff and rub resistance. Low odour and solvent retention

### TECHNICAL INFORMATION AND INK HANDLING

SUBSTRATES	Treated co-extruded polypropylene. Treated LD, LLD and HD polyethylene
	Where an all-over CRYSTAL white has been printed CRYSTAL PRO colours may be used for overprinting. For printing directly on to the film, or where enhanced resistance properties are required, CRYSTAL colours must be specified.
	The applications of these films and hence the specification requirements of their end uses and the inks on them can vary considerably from job to job. Specifications should be discussed with our technical service personnel.
REDUCTION	Normal - 83060-0850 Slow - 83060-1006 Retarder - 83060-0900 83060-0900 may be used as retarder for general applications but the slow solvents above, are recommended for food packaging. With any slow (retarding) solvent care should be taken to avoid solvent retention as even small percentages of "clean" solvents can cause odour and taint.
	No guarantees for our ink can be given if the above solvent reduction is not followed. The use of other solvents and solvent blends are known to cause problems such as blocking, odour and reduced bond strength. In extremely severe cases the wrong solvent can cause "Ink Chunk Out".

WASH UP	83060-0850
ROLLERS AND STEREOS	Being alcohol rich, CRYSTAL inks can be run with most normal rubbers rollers and stereos. Photo polymer plates may also be used with high alcohol diluents.
PRESS SPEED	CRYSTAL inks may be used at press speeds of 50-250 m/min. using the appropriate reducers. They are particularly suited to high speed running.
COLOUR RANGE	CRYSTAL inks available in wide range of colours only occasionally being limited by selecting pigments suited to particular specification requirements. The pigments used have reasonable light fastness but may not be suited to extended exposure to direct sunlight. If this property is required it should be stated at the time of ordering and pigments of appropriate light fastness will be utilized.

QUALITY CONTROL TEST	STD.
VISCOSITY	120 CP./20°C
DENSITY colours	0.940 ± 0.05 Kg/L
white	1.200 ± 0.05 Kg/L
FINENESS	OFF GAUGE
LIGHTFASTNESS (blue wool scale)	6-8
% SOLIDS colours	30 ± 1 %
white	53 ± 1 %
ADHESION (TAPE) /24 Hrs.	100.0%
% WATER CONTENT	None
GLOSS 60./15u	75 ± 5
HEAT RESISTANCE 500g/cm <sup>2</sup>	180 °C /1.0 Sec.
RUB/SCRATCH/SCUFF/24 Hrs	Very good.
C.O.F. STATIC/DYNAMIC/24 Hrs.	0.18 ± 0.02
DEEP-FREEZE RESISTANCE 24 Hrs.	Very good
RECOMMENDED SURFACE	PP / PE
FOOD GRADE	Yes

This information has been carefully compiled from experience gained in field conditions and detailed laboratory testing. However, the product's performance and its suitability for the customer's purpose depend on the particular conditions of use and the material being printed. We recommend that customers satisfy themselves that each product meets their requirements in all respects before commencing a print run. Since we cannot anticipate or control the conditions under which our products are used it is not possible to guarantee their performance.

We would point out that the information contained in this leaflet is only a recommendation and may need to be altered to suit the conditions and efficiency of the equipment employed. Our products are not designed for use in conjunction with those of any other ink maker or similar supplier unless agreed to in writing. All sales are subject of our standard terms and conditions of sale.