



## Gecko® Frontal Eco

Solvent based printing inks for flexible packaging  
Standard surface printing



### Description

A full colour range of highly pigmented nitrocellulose printing inks designed for surface printed applications on papers and flexible films, supplied as finished products or for use as mono component concentrates and additives within an ink dispenser formulation.

### Applications

Flexible and semi-rigid packaging for food, carrier bags, tobacco and beverage products printed on coated and un-coated papers, polyethylene, and polypropylene films. May be used on Cellophane with the addition of an anti-pinhole compound (see list of additives).

### Print Process

Surface print Flexographic and Rotogravure.

### Properties

Ink adhesion	5	Water resistance	4
Rub resistance	4	Deep freeze resistance	4
Anti-scratch	4	Vegetable oil resistance	4
Heat resistance	160 °C - 180 °C	C.O.F. (dynamic)	0.25 - 0.35
Gloss	4	Lamination bond	n/a
Light fastness (BWS)	3 - 7	Lamination heat seal bond	n/a

**Rating scale** (1 to 5 based on Gecko product range) 1 = worst value, 5 = best value

**Note:** All resistance properties are a guideline only and dependant on pigment selection

Substrates	Paper	NC coated alu	LDPE	HDPE	Coex OPP	Cellophane
Secondary Web	n/a	n/a	n/a	n/a	n/a	n/a

### Print viscosity

Diluents	Flexographic 20 - 25 sec. DIN 4		Gravure 15 - 20 sec. DIN 4	
Slow	N. Propanol/N. Propyl Acetate	9:1	N. Propanol/N. Propyl Acetate	3:1
Standard	Ethanol/Ethyl Acetate	9:1	Ethanol/Ethyl Acetate	3:1
Fast			Ethanol/Ethyl Acetate	1:1
Retarder	Ethoxy Propanol		Ethoxy Propanol	

### Auxiliaries

- White** A single component Gecko Frontal Eco white is available for flexographic printing and a 2 component white is available for rotogravure printing.
- Metallics** A full range of Gecko gold and silver inks is available..
- Additives** For adhesion on OPP the addition of adhesion promoter may be required. A full range of additives is available to modify the characteristics of GFE.
- Process Inks** A range of slow drying flexo half-tone process colours are available

### Health & Safety

The material safety data sheets contain all relevant information for the generation of appropriate internal plant instructions. The user is responsible for all local legislation requirements. Regarding food packaging applications see the „Declaration of Conformity“.

### Ink Handling

Please refer to General Guidelines for handling inks for flexible packaging.

Contact addresses for advice and further information can be found under [www.hubergroup.de](http://www.hubergroup.de)

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