

EMBLEM
Easy Protect 1K ECOSOL

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Matchcode:	EASYPROTECTECO
Type of Material:	self curing, water based 1-component liquid coating for ECOSOL Inks
Protection against mechanical strain:	normal high
UV Protektion:	2 - 3 x
Surface finish:	glossy
Colour (dry):	clear colourless
Application method:	paint-roller, liquid-laminating machine, spray-painting
Weight / thickness :	dry ~30 µm (equals wet ~100 µm)
Viscosity (usage and delivery) :	50-70 seconds (DIN measuring cup 4 mm)
Mixing ratio :	not applicable
Thinner :	water
Drying time :	safe-to-touch after 2 hrs, allow 24-48 hrs for complete drying on air
Pot life :	see shelf life
Container size :	1 kg and 5 kg
Shelf life :	12 months minimum
Shipping restrictions :	not applicable *
Identification marking according to EU rules :	not applicable *
Chemical composition and Toxicology:	below *

* refer to Safety sheet

For use on substrates printed with:

Piezo Eco Solvent Inks:	yes
Bubble / Piezo Jet, water based dye ink:	restricted (test required)
Bubble / Piezo Jet, water based pigm. ink:	restricted (test required)
Piezo oil ink:	no
Piezo Solvent Inks:	yes
Laser prints:	yes

Product description and characteristics:

EMBLEM Easy Protect 1K ECOSOL is a self curing, water-based, flexible liquid coating, especially developed for ECO Solvent Inks. For optimising the resistance of Digital / Inkjet Prints on decals, banners, (self adhesive) films, and others. For best results, the used ingredients have been carefully selected. The range of substrate material covers plastics like PVC, Tyvec, Polystyrene, Polycarbonates, Paper und Cardboard. Tests have proven a considerable slowing down of aging defects during outdoor use, and an UV-protection factor of 2-3. Prior to the coating, prints must be completely dry and free of solvent-remains. This coating is not suitable for prints with oil-based inks.

Typical range of application:

Vinyl- and Polyolefin- self-adhesive films, plastic substrates for displays and advertising , plates for fair booths, outdoor decals and industrial use. For truck tarpaulins or other outdoor / car application, we recommend use of our **EMBLEM Easy Protect 2K** products.

Processing and Drying:

(refer also to "EMBLEM Instruction and hints for roll-application")

Thoroughly clean the surface of the substrate to be coated. Stir the liquid coating well, by means of propeller stirrer (Part No: 16880) avoid to make air-bubbles. After a short neutral phase (ease period) of some minutes, the coating is finish for application. The flow-characteristics have stabilised and air bubbles have disappeared. The viscosity must be 50-70 seconds, check with (Measuring-cup DIN 4mm Part No.: 16886). Use fabric filter for filtration if necessary.

For optimal protection, apply a minimum thickness of 100 Microns (wet). Use measuring-gauge (Part No.: 16878) for verification.

Application with paint roller:

(Part No: 16882)

Saturate paint-roller well with water and squeeze water out again. Then hold the paint-roller over the substrate and pour the liquid coating on it. Immediately roll out the coating on the substrate. Give more coating on the substrate for a second time and spread it evenly, until a near homogenous finish is achieved. In order to reach the required thickness of the coating, the force on the paint-roller must be as low as possible.

In the beginning of the rolling-out process, a certain distortion (air-bubbles, dimpled skin / orange-peel) may show in the surface of the coating. These distortions disappear during the following drying process.

Avoid repeated over-rolling respectively crosswise rolling, because this interrupts the interlacing process and hinders building up a closed, plain coating.

When apply the liquid coat using the SPRAY-PAINT (Spray-gun) process, the viscosity of the lacquer has to be lowered to approx. 30 - 50 sec, by using 5 -10% water as thinner. Check with EMBLEM measuring-cup (DIN 4mm Part No 16886).

Drying process:

At room temperatures (20-25°C) Easy Protect Ecosol coating will be safe to touch after approx. 2 hrs. For complete drying / hardening, allow the coated substrates to dry 24 - 48 hrs in normal environment. This process can be accelerated considerably by using an extra drying unit at a temperature of 50°C. Please note, that final fastness of the coating will be reached after 5 - 7 days.

Cleaning of used equipment should be accomplished immediately after finishing the coating work. Use water or our Special Cleaning Agent (Part No: in preparation).

Paint-rolls are washed easily with our roller washing gadget (Part No: 16879).

Shelf life:

Minimum 12 months for the liquid coating in closed containers, under normal environment conditions (15-25°C)

According to the federal bureau of health (BAG), the coating substance is registered under BAG-T 619000 "NON TOXIC" and classified as "Non Hazardous Material".

For additional information, refer to the relevant safety sheets.

Necessary tools, accessories and utilities :

EMBLEM Easy paint-roller 250 mm	(Part No: 16882) *
	or 400 mm (Part No: in preparation)
EMBLEM Handle for paint-roller 250mm	(Part No: 16883) *
	or. 400 mm (Part No: in preparation)
Telescopic expander (for roller) 100..200cm	(Part No: 16884)
EMBLEM retainer-tube f. roller 250mm	(Part No: 16885) *
EMBLEM propeller stirrer	(Part No: 16880) *
Viscosity measuring-cup DIN 4mm plastic	(Part No: 16886) *
Mixing bin set 200 / 500 ml	(Part No: in preparation) *
Thickness measuring-gauge (Stainless steel)	(Part No: 16878) *
Digital scale 2200 g	(Part No: in preparation)
	or 6000 g (Part No: in preparation)
EMBLEM Special cleaning agent (1L)	(Part No: in preparation) *
Roller washing gadget (f. rollers up to 350 mm)	(Part No: 16879)
EMBLEM Starter-set includes the * marked articles	(Part No: in preparation)

Disclaimer: Information is subject to change. All information given with our best knowledge, are based on practical experience and laboratory findings. Due to the great variety of material combination, and innumerable possible influences during application and use of the material, which is beyond our control, all given information are without obligation.

We recommend to carry out own tests. A legally binding warranty or attributes cannot be derived from our specifications. Use other than specified, change of mixing ratio or application, or adding of other material is done on own risk. Every liability beyond the product warranty and/or the product's value, as well as entitlements to further damage's are excluded.