

Product Descriptions

CMR-450 2C-Clear Coat for Tarpaulin - automatic



Version: V-2020-001



Characteristic:

CMR-450 is a water based clear coat (2-component), its basic is polyurethane. It is to be cross-linked by CMR-640. It is used as high-gloss and high-flexible liquid laminate on digital printed PVC tarpaulins, and non-printed flexible surfaces too.

Medias printed with pigmented solvent inks, Latex and UV inks (logos, lettering, pictures) are protected against attrition and scratches.

Coated surfaces achieve outstanding colour brilliance and easy-to-clean properties. Because of its water- and weather resistance, this protection film is used especially for outdoor applications.

In general the application is made by machines and liquid coater (Mayer bar).



Only for liquid coater!

Typical Data:

Basic:	aqueous polyurethane dispersion
Colour:	milky white liquid
Crosslinker:	CMR-640 (10:1)
Potlife:	4 hours (20 °C)
Solubility:	miscible with deionized water
Wet film:	70 - 80 μ
Dry film:	20 - 30 μ
Spreading rate:	10 - 15 sqm per kg
Solids content:	30 - 35 %
Specific gravity/density (20 °C):	1.05 g/cm ³
pH value:	7.0 - 8.0
Neutrality:	ammonia
Viscosity at 20 °C (4 mm DIN flow cup):	12 - 18 s
Minimum film forming temperature (MFT):	0 °C

Suitable Substrates:

Plastic films: PVC, tarpaulins

With corona pre-treatment the system is suitable as a coating for all kinds of plastics.

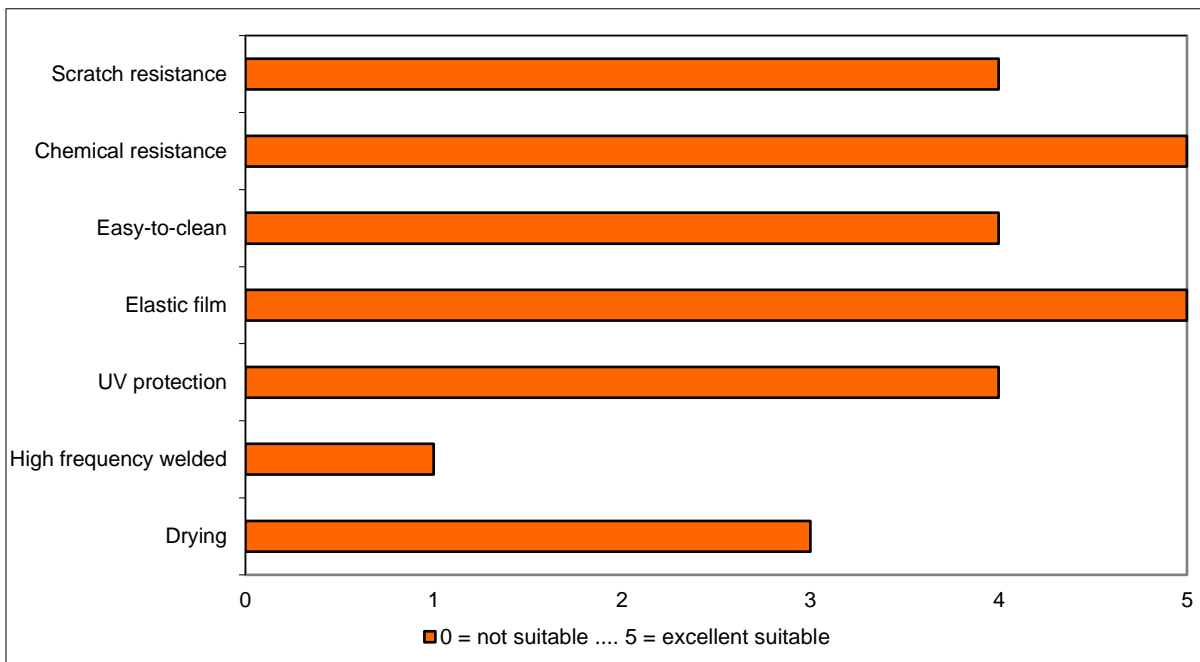
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Properties:

Transparent, high-gloss or matt
 High flexibility
 Scratch resistance, mechanical properties, hard and abrasion resistant
 High chemical resistance
 Easy-to-clean, polishable
 UV protection
 Elastic film (over 200 %)
 Blocking temperature 145 °C, cold stable until -20 °C
 Plasticizer blocking feature
 High frequency welded
 The high-gloss version is suitable for thermoforming and embossing (short time thermostable up to 180 °C)
 Without pre-treatment the system is suitable for all PVC and vinyl plastics.
 With corona pre-treatment the system is suitable as a coating for all kinds of plastics.



Spreading Rate:

Solids content	Thickness wet g/m ²	Thickness dry g/m ²	Coated surface m ² /kg	kg for surface of 80 sqm
36%	75	27	13	6

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Recommendation for end-use:

- Storage:

The product may be stored at least 6 months if kept in tightly closed container and below 25 °C.

Protect against cold.

Don't store and apply the product below +5 °C.

- Application:

The product can be apply by usual methods: spraying, rolling and printing.

The viscosity of the lacquer was adjust for manual application by roll (e. g. Velours).

For spraying or automatic application further adjustment of viscosity can be necessary.

A dilution of max. 5% water is possible.

Spray gun:	Viscosity:	18 - 22 s
	Dilution:	water
	Nozzle:	1.2 - 1.6 mm
	Pressure:	3 - 4 bar
	Spraying:	1 - 2

- Drying-Conditions:

The crosslinking process is reached by adding of the hardener.

It can be dried by room temprature and forced drying.

Drying time (for 25 µ dry film):
Dry at room temperature (20 - 25 °C) after 2 - 3 h.
After 16 - 20 hours the layer is dry-to-touch and can be rolled up.
Forced drying (60 - 80 °C) after 30 - 60 s.
After around one week the cross-linking process is finished and the ready surface has reached its definite chemical resistance and physical properties.

In all cases of CMR coating-systems, the stamp of the single characteristics depends very strongly on the respectively related underground (substrate and/or inks).

For this reason we recommend to make trials in every special case.