

Practical Application Guide for CMR Clearcoats

Primer (e. g. CMR-790)

V-2021-001



General Description:

CMR primers are self cross-linking acrylate co-polymers. They are used as adhesive agents or primers for difficult substrates. These universal primers allow a subsequent printing with solvent and UV-curable inks. Especially for solvent inks the primers create a colour brilliant print image because the pigments are stabilized faster after printing.

Preparation and Processing:

In order to obtain optimal end product properties it is mandatory to strictly follow the processing instructions detailed here-below.

Each primer always has to be stirred well before processing.

Applications:

The application of CMR primers can be performed with the usual methods. Automatically application by means of mayer bar liquid laminators or anilox rolls with pressure chamber knives is as well possible as by several manual applications e.g. rolling, spraying, wiping.

Pretreat the substrates before application of CMR primers systems adequately and clean them well in order to achieve an optimal and complete wetting of the substrate and permanent adhesion. Every residues (e.g. grease, silicone, oil ect.) on the substrate which may prevent an adhesion have to be removed.

Processing time is very much depending on the ambient temperature. Recommended temperature is between 18 °C and 30 °C. Relative humidity should not exceed 60 %.

As with all CMR primer systems the value of the individual characteristics is determined by the sort of substrate (tarpaulin, foil and / or ink, e.g. UV, solvent or latex ink). Therefore we recommend to strictly conduct adequate tests in advance.

The Viscosities of the primers are adjusted to a manual application with a roll made of velours as well as for an application by liquid coater. For use of a spray gun the viscosity of the primer probably has to be adjusted. For this method the viscosity should lie in the range of 20 - 30 sec at 20 °C (4 mm DIN flow cup). The adding of distilled water should not exceed 10 %.

Micro Sponge Application:

Depending on the application and the necessary thickness of the dry coating the primer can be diluted with deionized water in any ratio.

Particularly with regard to the priming of inelastic ground the application by wiping with a micro sponge (CMR code 00210) delivered an optimal performance in practice.

Put the micro sponge completely in water till it soaked.

Press the surplus water of the sponge.

Fill the primer in a suitable pot (12 x 8 x 6 cm) with a filling height of 1 to 2 cm.

Place the sponge lengthwise into the pot. Wait 3 minutes till the sponge absorbs the primer.

Apply the primer with the long side of the sponge by cross application.

When finished clean the sponge by intensive flushing with water as long as no primer leaks from the sponge when you press it out.

Generally CMR primers may be over lacquered as far as the surface is dried well (after at least 12 hours). Blemishes can be restored afterwards.

Drying-conditions:

The drying of CMR primers is physical, that means the level of temperature determines the time that is required for a total film formation.

The coated surface will be dust-dry after few minutes at room temperature (20 - 25 °C).

A forced drying between 60 - 80 °C shortens the process of drying significantly. In any case a sufficient air circulation will improve the drying conditions.

Cleaning of Equipment:

Clean all rolls and all devices with lukewarm tap water immediately after use (the dry primer is not water soluble anymore).

A small amount of slightly alkaline detergents added to the water can enhance effectiveness. Dry primer residues must be removed mechanically or with the aid of suitable solvents.

Storage:

When the original containers are kept tightly closed and stored in a cool place (at average temperatures between 10 °C and 25 °C, without frost and without sudden temperature changes) shelf life is 6 months.

Open containers should be used up as soon as possible.

Container must be tightly closed.

The use-by date of the CMR-Primer will not change after diluting it with water.

Safety:

Informations on necessary personal protective equipment (gloves, protective goggles etc.) as well as instructions regarding hygiene and waste disposal are contained in respective safety data sheet! Therein you will also find advise for appropriate disposal of waste.

Please consider additional and specific information of technical data, respectively of processing of CMR primer systems.

These informations reflect our current state of knowledge and they are intended to inform on our products and its application possibilities. You cannot deduce any legally binding guarantee regarding specific properties of the products or their suitability for definite applications. Also they do not release the user to make test of our products concerning its suitability for the planned applications. Rights regarding trademarks and patents also will have to be observed.