

# TEKNOCRYL AQUA COMBI 2780-91

## Water-borne single coat paint

TEKNOCRYL AQUA COMBI 2780-91 is an air-drying water-borne primer and single coat paint based on acrylate dispersion and alkyd. Contains active anticorrosive pigments.

Use: For single coat painting, but can also be used as primer in systems including a top coat, e.g. TEKNOCRYL AQUA 2790. Can be used both in- and outdoors for painting on steel, aluminium or zinc.

The paint dries quickly and has very good anticorrosive properties.



## TECHNICAL DATA

<b>Recommended substrate</b>	Steel, Aluminium, Zinc											
<b>Binder</b>	Acrylate											
<b>Solids</b>	42 ±2% by volume											
<b>Total mass of solids</b>	Approx. 620 g/l											
<b>Volatile organic compound (VOC)</b>	Approx. 41 g/l (DIRECTIVE 2010/75/EU) The VOC value provided is the average value for factory produced products, and consequently it will be subject to variations between individual products covered by this Technical Data Sheet.											
<b>Theoretical spreading rate</b>	<table border="1"><thead><tr><th>Dry film (µm)</th><th>Wet film (µm)</th><th>Theoretical spreading rate (m<sup>2</sup>/l)</th></tr></thead><tbody><tr><td>40</td><td>95</td><td>10.5</td></tr><tr><td>80</td><td>190</td><td>5.2</td></tr></tbody></table>	Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m <sup>2</sup> /l)	40	95	10.5	80	190	5.2		
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40	95	10.5										
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	As many of the paint's properties will change if too thick coats are applied, it is not recommended that the product is applied to a film thickness that is more than double of the thickest recommended film.											
<b>Practical spreading rate</b>	The values depend on the application technique, surface conditions, overspray, etc.											
<b>Colours</b>	Certain colours are delivered from stock. Can be adjusted individually for customers by agreement. White and light shades are susceptible for yellowing.											
<b>Gloss (60°)</b>	Semi-matt											
<b>Thinner</b>	Water.											
<b>Storage</b>	The storage stability is shown on the label. Store in a cool place and in tightly closed containers. Do not transport or store at temperatures below 0°C.  Must not freeze.											

## DIRECTION FOR USE

### Surface preparation

Remove from the surfaces any contaminants that might be detrimental to surface preparation and application. Remove also water-soluble salts by using appropriate methods. The surfaces are prepared according to the different materials as follows:

**STEEL SURFACES:** Remove mill scale and rust by blast cleaning to preparation grade Sa 2½ (standard ISO 8501-1). Roughening the surface of thin-plate improves the adhesion of the paint to the substrate.

**ZINC SURFACES:** Hot-dip-galvanized steel structures that are exposed to atmospheric corrosion can be painted if the surfaces are sweep blast-cleaned (SaS) till matt all over. Suitable cleaning agents are, e.g. aluminium oxide and natural sand. It is not recommended according to standard ISO 12944-5 to paint hot-dip-galvanized objects that are subjected to immersion strain. Painting of hot-dip-galvanized objects that are subjected to immersion strain must be discussed separately with Teknos.

It is recommended that new zinc-coated thin-plate structures are treated with sweep blast-cleaning (SaS). Thin-plate surfaces that have been weathered to matt can be treated also with RENSA STEEL washing agent.

**ALUMINIUM SURFACES:** Treat the surfaces with RENSA STEEL washing agent. Surfaces that are exposed to weathering are also roughened up with sweep blast-cleaning (AlSaS) or sanding.

**OLD PAINTED SURFACES SUITABLE FOR OVERCOATING:** Any impurities that might be detrimental to the application of paint (e.g. grease and salts) are removed. The surfaces must be dry and clean. Old, painted surfaces that have exceeded the maximum overcoating time are to be roughened as well. Damaged parts are prepared in accordance with the requirements of the substrate and the maintenance coating.

The place and time of the preparation are to be chosen so that the prepared surface will not get dirty or damp before the subsequent treatment.

Additional instructive information for surface preparation can be found in standards EN ISO 12944-4 and ISO 8501-2.

Prefabrication primer: KORRO PVB, KORRO E Epoxy and KORRO SS Zinc Silicate Prefabrication primers can be used, when required.

**Application method**

Airless spraying, Air-assisted airless spraying

**Application**

Stir thoroughly before use.

Apply preferably by airless spray or airless spray equipped with air-assisted pistol. Suitable airless nozzle size 0.013 - 0.018". Spray evenly to the specified film thickness. Special care should be taken when spraying edges, corners and welding joints. Small areas can also be painted with a brush, but in this case one additional coat has to be applied in order to achieve the specified film thickness.

For selection of suitable additives for the water curtain booth contact the supplier of these chemicals. Different types of water-borne paints often demand different additives, and therefore this must be determined for each case separately.

**Application conditions**

The surface to be treated must be dry. The temperature of the ambient air, the surface and the product shall be above +15°C and the relative air humidity 35-50%. Low relative humidity increases the risk of dry spray, and the levelling may also be poorer.

Additionally, the temperature of the surface to be treated and the product must be at least +3°C above the dew point of the ambient air.

If painted objects will be exposed to moisture and cold, they are to be kept indoors under normal ventilation conditions at a temperature of min. +20°C for a minimum of 40 hours before such exposure.

The relative air humidity must not exceed 60% and the drying temperature must not be below +15°C. High air humidity increases the time of evaporation for the water in the paint and thus prolongs the drying time. This can be prevented by increasing the temperature and/or the ventilation. Increased temperature results in a higher saturation point of the water vapour in the air, and the increased ventilation removes the water vapour more quickly. These measures shorten the drying time considerably.

**Drying time**

+23°C / 50% RH (dry film 40 µm)

**- touch dry**

40 µm: 45 min (ISO 9117-5:2012)

80 µm: 1 h (ISO 9117-5:2012)

**Overcoatable**

surface temperature	by itself or by TEKNOCRYL AQUA 2790	
	min.	max.
+15°C	6 h	-
+23°C	3 h	-

Increase in film thickness and rise in the relative humidity of the air in the drying space usually slow down the drying process.

## Cleaning

TEKNOSOLV 1936 if the paint has started to dry.

Cleaning of spraying equipment etc. before painting:

1. Rinse with TEKNOSOLV 1639 or similar.
2. Rinse with TEKNOSOLV 1936 or TEKNOSOLV 9515.
3. Rinse with water.

## HEALTH AND SAFETY

### Safety and precaution measures

See safety data sheet.

**Teknos Group Oy Takkatie 3, P.O.Box 107 FI-00371 Helsinki, Finland Tel. +358 9 506 091**

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