

## PROTEGATHERM PE20-W, 50-W, 90-W

**DESCRIPTION** Compliant, high quality, waterborne stoving polyester enamel.

**PRODUCT FEATURES AND RECOMMENDED USES**

- ◆ Suitable for high quality coating of household appliances, automotive components and general industrial finishing.
- ◆ Suitable for application by dipping.
- ◆ Excellent adhesion to pre-treated iron, aluminium and electro-deposition substrates.
- ◆ EPA Compliant to below 350gm/lit (less water) as a stoving enamel.

**TECHNICAL DATA**

**Volume solids** 25 - 40% (ISO 3233) depending on colour.

**Weight solids** 30 - 60% depending on colour.

**Viscosity** 60" – 120" BSB4 @ 25°C

**Specific gravity** 1.00 – 1.40.

**pH** 7.5 – 8.0

**Product code** Existing shades: 3884 series  
New shades: 3874 series.

**Recommended film thicknesses and theoretical coverage**

Recommended film thicknesses		Theoretical coverage
dry	wet	
20 µm	60 µm	17.3 m <sup>2</sup> /l
30 µm	100 µm	11.5 m <sup>2</sup> /l

Practical coverage depends on the application method, painting conditions and the shape and roughness of the surface to be coated.

**Drying time**

DFT 25 µm	+ 23°C
Flash off time	10 - 15 minutes
Curing	20 minutes @ 160 – 180°C (Peak Metal Temperature)

Drying times and recoating times are related to the film thickness, temperature, the relative humidity of the air and ventilation.

**Finish** Low gloss (PE20-W), Semi-gloss (PE50-W), High gloss (PE90-W).

**Colours** White, Black and other colours to customers specification.

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### APPLICATION DETAILS

<b>Surface preparation</b>	<p>Preliminary cleaning: remove oil grease with a suitable detergent. Remove salt and other contaminants by fresh water cleaning and allow to dry (ISO 12944-4). Pre-treatment improves adhesion and reduces corrosion under the paint film. The type of pre-treatment depends on the requirements for corrosion protection e.g.</p> <ol style="list-style-type: none"><li>1. Zinc phosphate with Cr-VI passivation.</li><li>2. Iron phosphate with demineralised water rinsing (insufficient rinsing can lead to the osmotic formation of bubbles).</li><li>3. Alkaline or neutral degreasing.</li><li>4. Clean steel.</li></ol>
<b>Application conditions</b>	<p>Only apply in conditions of good ventilation which must be maintained during drying. Do not apply when rain, mist, sleet or snow are imminent. During application and drying time of the paint coating, the surface should be dry, the ambient temperature should be above 10°C and the Relative Humidity should not exceed 80%. The steel temperature should remain at least 3°C above the dew point.</p>
<b>Mixing</b>	<p>Mix thoroughly before use.</p>
<b>Application</b>	<p>For dip application the viscosity should be 15 – 20 seconds DIN4 cup @ 25°C. Spray application, apply unthinned or thinned with water, equipment dependent. Suitable for spraying by conventional air spray, electrostatic spray, high speed disc or bells and hot airless spray.</p>
<b>Thinner</b>	<p>Demineralised or potable water. Extreme care should be taken as this product thins rapidly with the addition of water.</p>
<b>Cleaning of equipment</b>	<p>Remove remaining paint from equipment and rinse thoroughly with water. Repeat if necessary and rinse with cleaner for water borne paints, reference ProtegaClean 1921, or if paint has dried and is very stubborn to remove, use Thinner 1723.</p>
<b>FLASH POINT</b>	<p>Above 55°C</p>
<b>STORAGE</b>	<p>Store in dry, cool conditions and protect from frost.</p>
<b>VOC</b>	<p>Below 350 gm/lit (minus water basis), varies considerably with colour, please consult Protega Coatings for specific advice.</p>
<b>HEALTH AND SAFETY</b>	<p>Containers are provided with safety labels, which should be observed. Further information about hazardous influences and protection are detailed in individual health and safety data sheets. A health and safety data sheet is available on request from Protega Coatings Ltd.</p>