



## 1DM DIRECT TO METAL

### PRODUCT DESCRIPTION

CPC 1K DTM is a 1K Direct to metal product. It is a high productivity, one layer system with good adhesion to metal substrates.

A user friendly solution for applications where appearance and convenience count. As a single layer coating system, clean bare metal surfaces can be quickly painted in any of 10,000 colours in a fast dry finish that gives an object both a pleasing finish and basic protection from corrosion. Suitable for industrial, commercial, D.I.Y projects and many more.

Utilizing the SELEMIX® universal tinter system, Commercial Performance Coatings 1K Direct To Metal is available in a range of colours and gloss levels.

Note: These binders must NOT be used as clear coats by themselves and should always be tinted to a required colour.

### PRODUCTS

1K Direct To Metal Mixed Colour		1DM
Reducers		
	<i>Normal conditions</i>	AER20 Alkyd Enamel Reducer Normal
	<i>Hot conditions</i>	AER30 Alkyd Enamel Reducer Slow
Cleaners		
		971-9119 PROTEC® Metal Conditioner
		AA-6822 <i>Protec</i> Heavy Duty Wax & Grease Remover

### SUBSTRATES & PREPARATION



Commercial Performance Coatings 1K Direct To Metal can be applied over the following substrates once they have been prepared as follows:



#### SUBSTRATE

#### PREPARATION

Cast Iron

STARTLINE® P80-P120 - dry

Bare Steel

*Startline* P80-P120 - dry, or shot blast

Phosphated Steel

*Startline* Scourer

Light Alloys (Etch recommended) EPS EtchPro or 426/VIN Vinyl Etch Startline P280-P320 - dry

Aluminium (Etch recommended) EPS EtchPro or 426/VIN Vinyl Etch Startline P280-P320 - dry

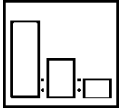
Galvanized Steel (Etch recommended) EPS EtchPro or 426/VIN Vinyl Etch Startline P80-P240 - dry

Surfaces showing heavy scale or surface rust should be treated with 971-9119 *Protec* Metal Conditioner. Heavily rusted surfaces should be abrasively blast cleaned.

Before and after any sanding operation, the substrate must be thoroughly degreased using AA-6822 *Protec* Heavy Duty Wax & Grease Remover to remove all traces of dirt, oil, grease, silicone, wax etc.

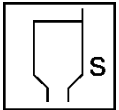
*Substrates other than those stated above should be tested before use, to ensure that the performance of this product is suitable for its intended use.*

### MIXING RATIO BY VOLUME



1K Direct To Metal	100
Reducer	Up to 30% (by volume)

### SPRAY VISCOSITY



CONVENTIONAL, HVLP	20 - 24 seconds (DIN 4) at 25°C
AIRLESS, AIR ASSISTED AIRLESS	30 - 40 seconds (DIN 4) at 25°C

### SPRAYGUN



#### **CONVENTIONAL, HVLP SETUP**

• GRAVITY	1.4 mm - 1.6 mm
• SUCTION	1.6 mm - 1.8 mm

#### **SPRAY PRESSURE**

• CONVENTIONAL	2.0 - 2.5 bar (200 - 300 kPa, 30 - 36 psi)
• HVLP / RP	2 - 3 bar



#### **AIRLESS, AIR ASSISTED AIRLESS SETUP**

• TIP	0.009 - 0.011
• PUMP RATIO	32:1

#### **SPRAY PRESSURE**

• AIRLESS	100 - 140 bar
• AIR ASSISTED AIRLESS	70 - 100 bar

## APPLICATION & FLASH OFF



CONVENTIONAL, HVLP	2 - 3 wet, even coats
AIRLESS, AIR ASSISTED AIRLESS	1 - 2 wet, even coats

Allow 10 - 15 minutes flash off between coats at 25°C

Note: Do not apply at temperatures less than 10°C, when the relative humidity exceeds 80% or if the surface temperature is within 3°C of the dew point.

## DRYING TIMES



### AIR DRY (25°C)

• TOUCH DRY:	15 minutes
• TACK FREE:	2 hours
• HARD DRY:	Overnight

Note: Drying times can vary dependent on temperature, flash off between coats, film builds and number of coats applied.

## RECOAT



Can be recoated up to 2 hours after application. Recommendations are based on 25°C ambient temperature.

If recoating is necessary after this time allow to dry overnight and abrade.

Aged films must be free of chalk and dirt (abraded and degreased) before recoating.

## TOTAL DRY FILM BUILD

50-75 µm

## TECHNICAL PARAMETERS

<b>VOLUME SOLIDS (RFU)</b>	28-32%, depending on colour
<b>COVERAGE</b>	5m <sup>2</sup> /L
<b>RESISTANCE PROPERTIES</b>	
<b>WEATHERING</b>	Good
<b>ABRASION</b>	Fair
<b>SOLVENT</b>	Poor
<b>CHEMICAL</b>	Poor
<b>HEAT</b>	Satisfactory up to 120°C Dry Heat
<b>IMMERSION</b>	Not recommended

## EQUIPMENT CLEANING

After use, clean all equipment thoroughly with cleaning solvent or thinner.

## HEALTH AND SAFETY

**Please refer to Safety Data Sheets (SDS) for full Health and Safety details, as well as product can labels.**

Hardeners and activated products contain isocyanate and therefore particular safety precautions must be taken; please refer to SDS for full health and safety details.

This product is for professional use only.  
The information given in this sheet is for guidance only. Any person using the product without first making further inquiries as to the suitability of the product for the intended purpose does so at his or her own risk and we can accept no liability for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of such use. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.  
Drying times quoted are average times at 25°C/77°F. Film thickness, humidity and shop temperature can all affect drying times.

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