PPG Commercial Performance Coatings

TECHNICAL DATA SHEET

2K DIRECT TO METAL

PRODUCT DESCRIPTION

Commercial Performance Coatings 2K Direct To Metal is a two component polyurethane technology containing anticorrosive pigmentation, which can be applied direct to metal substrates giving a high gloss finish.

It is a high productivity, one layer system that can be applied at high film thicknesses - up to 160µm wet film - with good adhesion to most common substrates such as bare steel, tinplate, iron, stainless steel (blasting recommended) and glass fibre reinforced plastics.

Utilizing the SELEMIX® universal tinter system, Commercial Performance Coatings 2K 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

2KDirect To Metal Mixed Colour		2DM
Hardener		DMH10 Direct To Metal Pack B Fast DMH20 Direct To Metal Pack B
Reducers	*Cold conditions*	PUR10 Polyurethane Reducer Fast
	Normal conditions	PUR20 Polyurethane Reducer Normal
	Hot conditions	PUR30 Polyurethane Reducer Slow
	Very Hot conditions	PUR40 Polyurethane Reducer Extra Slow
Cleaners		971-9119 PROTEC® Metal Conditioner AA-6822 *Protec* Heavy Duty Wax & Grease Remover

SUBSTRATES & PREPARATION

Commercial Performance Coatings 2K Direct To Metal can be applied over the following substrates once they have been prepared as follows:

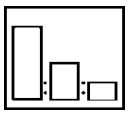
SUBSTRATE	PREPARATION
Cast Iron	STARTLINE® P80-P120 - dry
Bare Steel	*Startline* P80-P120 - dry, or shot blast
Phosphated Steel	*Startline* Scourer
Light Alloys	*Startline* P280-P320 - dry
Aluminium (Etch recommended)	*Startline* P280-P320 - dry
Fibre Reinforced Plastic	*Startline* P240 - dry

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.

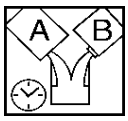
Substrates other than those stated above should be tested before use, to ensure that the performance of this product is suitable for its intended use.

MIXING RATIO BY VOLUME



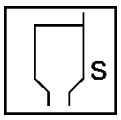
2K Direct To Metal	4	
DMH10 or 20	1	
Reducer	20 - 40%	*(by volume)*

POT LIFE



Catalysed material is useable for up to 2 hours at 25°C

SPRAY VISCOSITY



CONVENTIONAL, HVLP	18 - 25 seconds (DIN 4) at 25°C
AIRLESS, AIR ASSISTED AIRLESS	25 - 32 seconds (DIN 4) at 25°C

SPRAYGUN

CONVENTIONAL, HVLP

SETUP

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

SPRAY PRESSURE

• CONVENTIONAL	3.0 - 4.0 bar (300 - 400 kPa, 45 - 60 psi)
• HVLP / RP	2 - 3 bar

AIRLESS, AIR ASSISTED AIRLESS

SETUP

• TIP	0.011 - 0.013
• 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)	**DMH10**	**DMH20**
• TOUCH DRY:	20 minutes	1 hour
• TACK FREE:	40 minutes	2 hours
• HARD DRY:	24 hours	24 hours
BAKE (60°C)	30 minutes	45 minutes

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

RECOAT

Can be recoated for up to 7 days without sanding.

If recoating after 7 days the coating must be lightly abraded and degreased prior to painting.

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

TOTAL DRY FILM BUILD

60 - 100 µm

TECHNICAL PARAMETERS

VOLUME SOLIDS (RFU)	50 - 55%, depending on colour
COVERAGE	4.2 - 5.6 metres squared per litre (m²/L)
RESISTANCE PROPERTIES	
WEATHERING	Good
ABRASION	Good
SOLVENT	Good to splash and spillage for common solvents
CHEMICAL	Good to splash and spillage for mild chemicals
HEAT	Satisfactory up to 120ºC Dry Heat
IMMERSION	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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