



## TECHNICAL DATASHEET

Issue date: May 2023

# SELEMIX<sup>®</sup> DIRECT PRO SEMI-MATT

#### **PRODUCT DESCRIPTION**

*Selemix* Direct Pro Semi-Matt is a versatile, high solids 2-pack Acrylic PU finish that can be applied directly to a variety of substrates without need for a primer, giving a very efficient process.

It gives a high quality semi-matt finish with good colour and UV stability. Its good anticorrosive properties make it suitable for the finishing and protection of machinery, agricultural and construction equipment, and many other industrial painting applications.

#### PRODUCTS

7-154	Selemix Direct Pro Semi-Matt White Colours
7-153	Selemix Direct Pro Semi-Matt Neutral Colours
Hardeners:	
9-158	Fast Hardener for Acrylic
9-154	Medium Hardener for Acrylic
9-152	Slow Hardener for Acrylic
Thinners:	
Tilline 5.	
1-155	Extender Thinner
1-156	Slow Extender Thinner

#### SUBSTRATES AND PREPARATION



Steel (Blast Cleaned)	Blast clean to ISO 8501-1 SA 2.5 with a blast profile of maximum 40 μm Rz
Steel	Machine sand with P80-120 discs and degrease
Galvanised steel	Abrade with SCOTCHBRITE® and degrease
Aluminium	Machine sand with P240-320 discs and degrease
Painted Surfaces	Machine sand with P240-320 discs and degrease
Selemix Epoxy Primer or PU Primer	Refer to Primer TDS for recoat time
GRP	Machine sand with P240-320 discs and degrease
Plastics (PA, PC, ABS, PC/ABS, PMMA, PVC) PP	Abrade with SCOTCHBRITE <sup>®</sup> and degrease PP must be flame treated before painting

Apply only on a clean and dry surface with a temperature above the dew point to avoid condensation. In confined spaces, provide adequate ventilation during application and drying.







#### MIXING

Thoroughly mix paint before activating and check colour before use

	Features	Conventional	Air-Assisted Airless
	<b>By Weight:</b> 7-153 / 7-154 Topcoat 9-15X Hardener Thinner	1000 250 150-200	1000 250 50-150
].[].	<b>By Volume:</b> 7-153 / 7-154 Topcoat 9-15X Hardener	3 1	3 1
	Thinner	0.5-0.75 (15-25%)	0.2-0.5 (7-15%)
s	Viscosity (at 20°C): Pot Life/Double Vx (at 20°C): Workable Time (at 20°C):	28-36 secs DIN4 1.5-2 hours 1.5 hours	36-45 secs DIN4 1.5-2 hours 1 hour

### FOR PLURAL MIX EQUIPMENT:

Paint is pre-thinned as below and used through plural mix equipment to mix the hardener. Use 9-152 Hardener.

	Features	Plural Mix Air-Assisted Airless Spray		
		High Build	Standard	
[]:[]: <b>[</b>	<b>By Weight:</b> 7-153 / 7-154 Topcoat + Thinner	1000 + 50 Pre-mixed	1000 + 150 Pre-mixed	
	9-152 Hardener	250	250	
	<b>By Volume:</b> 7-153 / 7-154 Topcoat + Thinner	3 + 0.2 Thinner Pre-mixed	3 + 0.5 Thinner Pre-Mixed	
s	9-152 Hardener	1	1	
	Viscosity (at 20°C):	36-40 secs DIN4	40-45 secs DIN4	





#### **APPLICATION**



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Features	Conventional	Air-Assisted Airless
Spraygun setup:	Nozzle: Gravity: 1.8mm Suction: 1.8-2.0mm Pressure feed:1.2-1.4mm	Nozzle: 09-11 thou 0.23-0.28mm
Air Pressure: (refer to spraygun manufacturer)	HVLP: 2 Bar Standard: 2.5-3 Bar	2.5 Bar
Fluid Pressure:	N/A	100 Bar
Number of coats:	2	2 (or 1 Visit)
Flash-off between coats:	15 mins	15-20 mins (or 2 mins for 1 Visit)
Drying:	Air dry or bake at 50°C for 30-45 mins	Air dry or bake at 50°C for 30-45 mins
Flash-off before bake:	10-15 mins	10-15 mins
Wet Film Thickness:	150-175 microns (2 x 75 -100 μm)	150-175 microns (130-150 μm 1 Visit)
Dry Film Thickness:	90-110 microns	90-110 microns (70-80 μm 1 Visit)
Film Thickness Note:	Dry film thicknesses of 120 mic use over blast cleaned steel) b followed by 2 full coats.	crons can be achieved (e.g. for y applying one light coat,

#### **DRYING TIMES**



at 20°C

Dust Free Touch Free Tape Free Handleable Hard Dry	20 mins (or 15 mins with Fast Hardener) 3 hours (or 2 hour with Fast Hardener) 6 hours (or 3 hours with Fast Hardener) 8 – 10 hours (or 5 - 6 hours with Fast Hardener) 1 day (or overnight with Fast Hardener)
Stoving:	30 minutes @ 50°C (according to film thickness)
Overcoating time:	Minimum: when Hard Dry Maximum: 1 month by itself without sanding
Note:	Lower temperature or film thickness higher than 100µm will extend drying times







#### STRUCTURED / TEXTURED FINISH

A structured / textured finish can be achieved with Selemix Direct Pro using the following process.

- 1. Apply a first coat of 7-15X as normal, ensuring that the film thickness is sufficient to cover and protect the substrate.
- 2. Allow 30 mins flash-off time at 20C
- 3. Mix the 7-15X Direct Pro 3:1:0-0.2 with 9-15X Hardener and 1-155 Thinner More thinner will give a finer texture and less thinner will give a coarser texture.
- 4. Apply a coat using a gravity gun with a 1.8-2.5mm tip at 0.1-0.3 Bar pressure Lower pressures will give a coarser texture, higher pressures, a finer texture
- 5. Air dry, or allow 15 mins flash-off before baking.

#### **TECHNICAL DATA**

Based on ready-for-use mixed paint including thinner:	Conventional Spray	Air-Assisted Airless Spray
VOC (g/L):	437-486 g/L	403-467 g/L
Solid content (weight):	55-63%	57-66%
Solid content (volume):	47-52%	49-56%
Solvent content (weight):	37-45%	34-43%
Specific gravity (Ready for use)	1.08-1.18	1.09-1.20
Theoretical coverage at 100 microns DFT:	4.7-5.2 m <sup>2</sup> /L	4.9-5.6 m <sup>2</sup> /L
Theoretical coverage at 100 microns DFT:	4.0-4.8 m <sup>2</sup> /Kg	4.1-4.8 m <sup>2</sup> /Kg
Theoretical solvent emission per sq. m at	-	
100 microns DFT:	84-103g per m <sup>2</sup>	72-95g per m <sup>2</sup>
Gloss:	Semi Matt	Semi Matt

#### **PRODUCT CODES AND DESCRIPTIONS**

Selemix Code	Short Code	Product Description	Packsize	
7-154/E18K	7-154	Direct Pro Semi-Matt Binder White Colours	18	Κ
7-154/E4.5K	7-154	Direct Pro Semi-Matt Binder White Colours	4.5	Κ
7-153/E15K	7-153	Direct Pro Semi-Matt Binder Neutral Colours	15	Κ
7-153/E3.75K	7-153	Direct Pro Semi-Matt Binder Neutral Colours	3.75	Κ
9-158/E1	9-158	Fast Hardener For Acrylic	1	Lt
9-158/E5	9-158	Fast Hardener For Acrylic	5	Lt
9-154/E1	9-154	Medium Hardener For Acrylic	1	Lt
9-154/E5	9-154	Medium Hardener For Acrylic	5	Lt
9-152/E1	9-152	Slow Hardener For Acrylic	1	Lt
9-152/E5	9-152	Slow Hardener For Acrylic	5	Lt
1-155/E5	1-155	Extender Thinner	5	Lt
1-156/E5	1-156	Slow Extender Thinner	5	Lt







#### HEALTH AND SAFETY

For comprehensive Health, Safety and Environmental advice, please refer to the relevant Material Safety Data Sheets and Product can labels.

#### 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 enquiries as to the stability of the product for the intended purpose does so at his 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 our experience and our policy of continuous product development. Drying times quoted are average times at 20°C. Film thickness, humidity and shop temperature can all affect drying times.

#### FOR FURTHER INFORMATION PLEASE CONTACT:

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