

TECHNICAL DATASHEET

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SELEMIX® DIRECT PRO SEMI-GLOSS

PRODUCT DESCRIPTION

Selemix Direct Pro Semi-Gloss 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-gloss 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

- 7-158 *Selemix* Direct Pro Semi-Gloss White Colours
 7-157 *Selemix* Direct Pro Semi-Gloss Neutral Colours

Hardeners:

- 9-158 Fast Hardener for Acrylic
 9-154 Medium Hardener for Acrylic
 9-152 Slow Hardener for Acrylic

Thinners:

- 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)

Abrade with SCOTCHBRITE® and degrease

PP

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 |
|---|---|---|---|
|  | By Weight: 7-157 / 7-158 Topcoat 9-15X Hardener 1-155 / 1-156 Thinner | 1000 250 200-250 | 1000 250 50-150 |
|  | By Volume: 7-157 / 7-158 Topcoat 9-15X Hardener 1-155 / 1-156 Thinner | 3 1 0.75-0.9 (25-30%) | 3 1 0.2-0.6 (7-20%) |
|  | 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 | 45-120 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 | | |
|---|---|---------------------------------------|------------------------------------|------------------------------------|
| | | Very High Build | High Build | Standard |
|  | By Weight: 7-157 / 7-158 Topcoat + Thinner 9-152 Hardener | 1000 + 50 Pre-mixed 250 | 1000 + 100 Pre-mixed 250 | 1000 + 150 Pre-mixed 250 |
|  | By Volume: 7-157 / 7-158 Topcoat + Thinner | 3 + 0.2 Thinner Pre-mixed | 3 + 0.4 Thinner Pre-mixed | 3 + 0.6 Thinner Pre-mixed |
|  | 9-152 Hardener | 1 | 1 | 1 |
| | Viscosity (at 20°C): | 100-120 secs DIN4 | 65-75 secs DIN4 | 45-55 secs DIN4 |

APPLICATION

| | 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 microns can be achieved (e.g. for use over blast cleaned steel) by applying one light coat, followed by 2 full coats. | |

DRYING TIMES

| | | |
|---|--|--|
|  | Dust Free Touch Free Tape Free Handleable Hard Dry | 20 mins (or 15 mins with Fast Hardener) 3 hours (or 2 hours 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) |
| at 20°C | 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 DFT 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 and Plural Mix |
|--|-----------------------------|---|
| VOC (g/L): | 461-484 g/L | 402-456 g/L |
| Solid content (weight): | 56-61% | 59-67% |
| Solid content (volume): | 47-49% | 50-56% |
| Solvent content (weight): | 39-44% | 33-41% |
| Specific gravity: | 1.10-1.17 | 1.11-1.20 |
| Theoretical coverage at 100 microns DFT: | 4.7-4.9 m ² /L | 5.0-5.6 m ² /L |
| Theoretical coverage at 100 microns DFT: | 4.0-4.5 m ² /Kg | 4.2-5.0 m ² /Kg |
| Theoretical solvent emission per sq. m at 100 microns DFT: | 94-103 g per m ² | 72-91 g per m ² |
| Gloss: | Semi Gloss | Semi Gloss |

PRODUCT CODES AND DESCRIPTIONS

| Selemix Code | Short Code | Product Description | Packsize | |
|--------------|------------|--|----------|----|
| 7-158/E18K | 7-158 | Direct Pro Semi-Gloss Binder White Colours | 18 | K |
| 7-158/E4.5K | 7-158 | Direct Dro Semi-Gloss Binder White Colours | 4.5 | K |
| 7-157/E15K | 7-157 | Direct Pro Semi-Gloss Binder Neutral Colours | 15 | K |
| 7-157/E3.75K | 7-157 | Direct Pro Semi-Gloss Binder Neutral Colours | 3.75 | K |
| 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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