

TECHNICAL DATASHEET

Issue date:
February 2022

SELEMIX® 2K POLYURETHANE DIRECT TOPCOATS

10% Gloss **7-530 / 7-531**

30% Gloss **7-532 / 7-533**

50% Gloss **7-534 / 7-535**

70% Gloss **7-536 / 7-537**

PRODUCT DESCRIPTION

Selemix 2K Polyurethane Direct Gloss Topcoat is a versatile, high solids 2-pack PU finish that can be applied directly to a variety of substrates without need for a primer, giving a very efficient process.

It is suitable for application by a wide range of methods including conventional spray, HVLP spray, airless spray or air-assisted airless spray. It has good adhesion to a wide variety of substrates and is available in 4 gloss levels. 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

| | |
|-------|--|
| 7-530 | <i>Selemix</i> Direct Gloss 10% Mixed Colour |
| 7-531 | <i>Selemix</i> Direct Gloss 10% Light Colours (for white and pastel colours) |
| 7-532 | <i>Selemix</i> Direct Gloss 30% Mixed Colour |
| 7-533 | <i>Selemix</i> Direct Gloss 30% Light Colours (for white and pastel colours) |
| 7-534 | <i>Selemix</i> Direct Gloss 50% Mixed Colour |
| 7-535 | <i>Selemix</i> Direct Gloss 50% Light Colours (for white and pastel colours) |
| 7-536 | <i>Selemix</i> Direct Gloss 70% Mixed Colour |
| 7-537 | <i>Selemix</i> Direct Gloss 70% Light Colours (for white and pastel colours) |

Note: Gloss levels are within +/- 10% depending on colour

Hardeners:

| | |
|-------|--------------------|
| 9-070 | Direct Hardener |
| 9-080 | Acrylic Hardener |
| 9-075 | HS Direct Hardener |

Thinners:

| | |
|-------|----------------------------|
| 1-470 | Slow Direct Thinner |
| 1-208 | Slow Thinner |
| 1-480 | Direct Thinner |
| 1-490 | Accelerated Direct Thinner |

Additive:

| | |
|-------|------------------------|
| 6-550 | Accelerator for Direct |
|-------|------------------------|

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 / Cast Iron

Machine sand with P80-120 discs and degrease

Galvanised steel

Abrade with SCOTCHBRITE® and degrease

Phosphated steel

Abrade with SCOTCHBRITE® and degrease

Aluminium / Light Alloys

Machine sand with P240-320 discs and degrease

GRP

Machine sand with P240 discs and degrease

Painted surfaces and fillers

Machine sand with P320-400 discs and degrease

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.

The speed of drying can be increased with use of 1-490 Thinner, or 6-550 Accelerator (added at 1-2%) but these can reduce the final gloss and shorten the potlife. Use of 1-490 Thinner AND 6-550 together is not recommended. Use of 1-490 Thinner or 6-550 when applied directly to aluminium is not advised.



Features: Standard System

Conventional

Air-Assisted Airless

By Weight:

7-53X Direct Topcoat
9-070 / 9-080 Hardener
1-480 / 1-470 / 1-490 Thinner

1000
200
170

1000
200
0-40



By Volume:

7-53X Direct Topcoat
9-070 / 9-080 Hardener
1-480 / 1-470 / 1-490 Thinner

4
1
1
(25%)

4
1
0-0.2
(0-5%)



Features: 9-075 HS Hardener

Conventional

Air-Assisted Airless

By Weight:

7-53X Direct Topcoat
9-075 Hardener
1-480 / 1-470 / 1-490 Thinner

1000
130
160

1000
130
80-110



By Volume:

7-53X Direct Topcoat
9-075 Hardener
1-480 / 1-470 / 1-490 Thinner

6
1
1.5
(25%)

6
1
0.7-1
(12-15%)



Viscosity (at 20°C):

20-25 secs DIN4




25-35 secs DIN4

Pot Life (at 20°C):


2-3 hours
1-2 hours with 1-490 Thinner

2-3 hours
1-2 hours with 1-490 Thinner

APPLICATION

| | Features | Conventional | Air-Assisted Airless |
|---|--------------------------|---|--|
|  | Spraygun setup: | Nozzle: Gravity: 1.8mm Suction: 1.8-2.0mm Pressure feed: 1.2-1.4mm | Nozzle: 7-530-7-535: 11-17 thou 0.28-0.43mm 7-536-7-537 11-13 thou 0.28-0.33mm |
| | Air Pressure: | HVLP: 2 Bar Standard: 2-3 Bar | 2-3 Bar |
| | Fluid Pressure: | N/A | 100 Bar |
|  | Number of coats: | 2 | 1-2 |
| | Flash-off between coats: | 10-15 mins | 10-15 mins |
|  | Drying: | Air dry or bake at 60°C for 45 mins | Air dry or bake at 60°C for 45 mins |
| | Flash-off before bake: | 5-10 mins | 5-10 mins |
| | Wet Film Thickness: | 160-200 microns | 160-200 microns |
| | Dry Film Thickness: | 80-100 microns | 80-100 microns |

DRYING TIMES

| | | |
|---|-------------------|---|
|  | Dust Free | 60 mins |
| | Touch Free | 1.5-2 hours |
| at 20°C | Tape Free | 16 hours |
| | Handleable | 6-10 hours |
| | Hard Dry | 16 hours |
| | Stoving: | 45 minutes at 60°C (according to film thickness) |
| | Overcoating time: | Minimum: when Hard Dry Maximum: 5 months by itself without sanding If 6-550 Accelerator or 1-490 Fast Hardener are used, it can be recoated with itself up to 24 hours without sanding. |
| | Note: | Lower temperature or film thickness higher than 100µm will extend drying times |

TECHNICAL DATA

| Based on ready-for-use mixed paint including thinner (depending on colour and gloss): | Conventional Spray 4:1:1 mix 9-070 / 1-480 | Air Assisted Airless Spray 6:1:0.7 mix 9-075 / 1-480 |
|---|--|--|
| VOC (g/L): | 497-534 g/L | 420-464 g/L |
| Solid content (weight): | 52-62% | 60-69% |
| Solid content (volume): | 39-44% | 47-52% |
| Solvent content (weight): | 38-48% | 31-40% |
| Specific gravity (Ready for use) | 1.12-1.30 Kg/L | 1.16-1.37 Kg/L |
| Theoretical coverage at 100 microns DFT: | 3.9-4.4 m ² /L | 4.7-5.2 m ² /L |
| Theoretical coverage at 100 microns DFT: | 3.0-3.9 m ² /Kg | 3.4-4.5 m ² /Kg |
| Theoretical Solvent emission per sq. m at 100 microns DFT: | 113-136 g per m ² | 81-99 g per m ² |
| Gloss | 10, 30, 50 and 70% +/- 10% as described | |
| Brush / Roller application: | Mix 6:1 with 9-075 Hardener and use unthinned | |

PRODUCT CODES AND DESCRIPTIONS

| Selemix Code | Short Code | Product Description | Packsize | |
|-------------------|------------|----------------------------|----------|----|
| 1.775.3000/E4.25K | 7-530 | Direct GL10% | 4.25 | Kg |
| 1.775.3000/E17K | 7-530 | Direct GL10% | 17 | Kg |
| 1.775.3100/E4.75K | 7-531 | Direct GL10% Light Colours | 4.75 | Kg |
| 1.775.3100/E19K | 7-531 | Direct GL10% Light Colours | 19 | Kg |
| 1.775.3200/E4.25K | 7-532 | Direct GL30% | 4.25 | Kg |
| 1.775.3200/E17K | 7-532 | Direct GL30% | 17 | Kg |
| 1.775.3300/E4.75K | 7-533 | Direct GL30% Light Colours | 4.75 | Kg |
| 1.775.3300/E19K | 7-533 | Direct GL30% Light Colours | 19 | Kg |
| 1.775.3400/E4.25K | 7-534 | Direct GL50% | 4.25 | Kg |
| 1.775.3400/E17K | 7-534 | Direct GL50% | 17 | Kg |
| 1.775.3500/E4.75K | 7-535 | Direct GL50% Light Colours | 4.75 | Kg |
| 1.775.3500/E19K | 7-535 | Direct GL50% Light Colours | 19 | Kg |
| 1.775.3600/E4.25K | 7-536 | Direct GL70% | 4.25 | Kg |
| 1.775.3600/E17K | 7-536 | Direct GL70% | 17 | Kg |
| 1.775.3700/E4.75K | 7-537 | Direct GL70% Light Colours | 4.75 | Kg |
| 1.775.3700/E19K | 7-537 | Direct GL70% Light Colours | 19 | Kg |
| 1.991.5070/E1 | 9-070 | Direct Hardener | 1 | Lt |
| 1.991.5070/E5 | 9-070 | Direct Hardener | 5 | Lt |
| 1.959.5080/E1 | 9-080 | Acrylic Hardener | 1 | Lt |
| 1.959.5080/E5 | 9-080 | Acrylic Hardener | 5 | Lt |
| 1.991.5075/E5 | 9-075 | Direct HS Hardener | 5 | Lt |

PRODUCT CODES AND DESCRIPTIONS (continued)

| | | | | |
|---------------|-------|----------------------------|---|----|
| 1.959.5080/E5 | 9-080 | Acrylic Hardener | 5 | Lt |
| 1.991.3208/E5 | 1-208 | Slow Thinner | 5 | Lt |
| 1.991.1470/E5 | 1-470 | Slow Direct Thinner | 5 | Lt |
| 1.991.1480/E5 | 1-480 | Direct Thinner | 5 | Lt |
| 1.991.1490/E5 | 1-490 | Accelerated Direct Thinner | 5 | Lt |
| 1.965.5000/E1 | 6-550 | Direct Accelerator | 1 | Lt |
| 1.965.5000/E5 | 6-550 | Direct Accelerator | 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:

Selemix Customer Service and Sales Group
Needham Road
Stowmarket, Suffolk
IP14 2AD, England
Tel: 01449 771771