

Vertical system coatings Fast-drying HighSolid-Systems

A vertical coating system combining primer and top coat was developed for the mechanical engineering industry with the goal of offering a HighSolid-Coating System with rapid drying times and excellent corrosion protection.



Save time.

Faster drying times with EFDEDUR HighSolids.

Reduce throughput times with our high-solid coating system

The EFDEDUR HighSolid-Primer UR1407 and EFDEDUR HighSolid coating UR1984 as a top coat were developed for the mechanical engineering industry with the goal of offering a brilliantly adhesive, resistant HighSolid coating system with excellent corrosion protection.

Another main goal of the development was rapid drying.

With a layer thickness of 50-70 µm (dry), the coated parts can be packed after just 60-90 minutes at room temperature. Optionally, an oven (up to 100 °C possible) can also be used to significantly shorten the drying time even more.

Data & facts

Product range	HS primer UR1407	HS top coat UR1984
Mixing ratio for curing agent HU0936	8:1	8:1
Viscosity on delivery, DIN 4 mm	100- 110 s	70- 75 s
Mixed viscosity	40- 45 s	30- 35 s
Solids content	78%	76%
Mixed solids content	75%	73.50%
Ready for installation (drying at RT)	Approx. 60 min.	Approx. 90 min.
Gloss level	Matt	30-40 E 60°
Pot life at room temperature (RT)	90 min.	90 min.

NSF approval



Both systems are listed and approved by the NSF (National Science Foundation) for indirect contact with foodstuffs.

This means that both coatings can be used for the coating of machinery in the food industry.

Highly adhesive, anti-corrosive and durable

Cross-cut test:
Excellent adhesion
to different surfaces

Product range	HS primer UR1407 and HS top coat UR1984	HS top coat UR1984
Steel, cold-rolled (ST1203)	Gt 0	Gt 0
Steel, smooth (R48)	Gt 0	Gt 0
Steel, blasted (SA 2 1/2)	Gt 0	Gt 0
Steel, iron phosphate coating (WHWOC)	Gt 0	Gt 0
Hot-dip galvanised steel	Gt 0	Gt 3
Stainless steel	Gt 0	Gt 1
Aluminium (smooth)	Gt 1	Gt 2-3
Cast aluminium	Gt 0	Gt 1

**Chemical
resistance**

HighSolid-Topcoat UR1984 is resistant against a variety of chemicals and operating materials.

This resistance can be increased even further in combination with HighSolid-Primer UR1407.

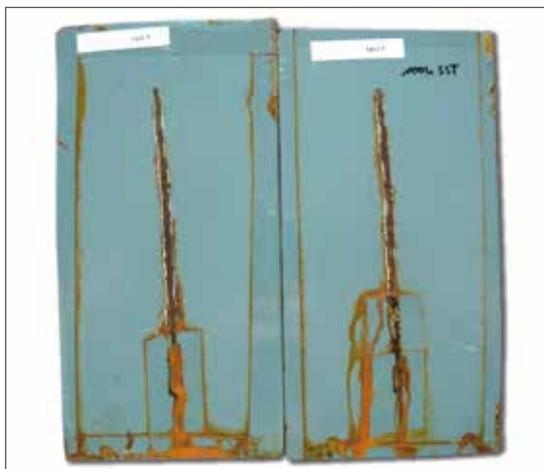
Chemicals tested at room temperature (RT)	HS primer UR1407 and HS top coat UR1984	HS top coat UR1984
Super unleaded (1 h)	+	+
Diesel (24 h)	+	+
Brake fluid (DOT 4) (24 h)	1	3
Antifreeze (glysantine) (24 h)	+	+
Gear oil (SAE 75W40) (7 d at 70°C)	+	+
Hydraulic oil (HLP Synth 46) (24 h)	+	+
Lubricant (Cutol MS) (24 h)	+	+
Engine cleaner (Motorplast CT25) (24 h)	+	+
Ethyl acetate (10 min.)	+	+
Xylol (10 min.)	+	+
Acetone (10 min.)	+	+

+ = No change
1 = Very little change
2 = Little (perceivable) change
3 = Moderate change (clearly
perceivable)
4 = Large change
5 = Coating layer destroyed

Suitable for use as either a single-layer or two-layer coating.

Corrosion protection Thanks to its excellent resistance and general adhesion, EFDEDUR HighSolid-Coating UR1984 can also be used indoors as a single-layer coating.

For higher stresses in outdoor areas, pre-priming should be performed by applying EFDEDUR HighSolid-Primer UR1407 or Epoxy-Resin FREOPOX-Primer ER1926.



Structure: UR1407 with UR1984
Total layer thickness
approx. 200 µm after 1,000 h SST

Substrate:
Smooth steel (left)
Blasted steel (right)

Creepage: <2 mm

Subsurface corrosion: 1 mm

No bubbles on surface or cut edge



Also suitable as a single-layer coating for interiors: EFDEDUR HighSolid-Coating UR1984

Are you interested? Then get in touch with our experts.

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