















Technical information (04/2021)

## GRAVIHEL PUR SINGLE COAT 421

- Two-component single-layer coating with high weather and UV protection for long-term exposure.
- Used for protection of construction and agricultural machinery, rail vehicles, different steel constructions, and for industrial painting which requires a high level of mechanical, chemical and weather resistance
- Direct adhesion to steel and plastics (like PVC windows and doors),
- **IMPORTANT:** for galvanized metal and aluminium mandatory use different hardener in different mixing ratio: details, please see the instruction on next page
- Can be used also in combination with GRAVIHEL ALUMINIUM pastes
  - 1 Full layer (1,3 HVLP, 2 bar) Flash off = 15 min.
  - 2 Full layer (1,3 HVLP, 2 bar) Flash off = 3 min.
  - 3 Fog (1,3 HVLP, 1,3 – 1,4 bar, reduced air)
- Filling in spray cans (2K pre-fill spray, index:302210)
- When changing GRAVIHEL ESS Thinner with GRAVIHEL 2K Additive final drying time reduces by half.

				CONSTRUCTION PLASTIC	
<b>SUBSTRATE PREPARATION</b>	 P220– P280	 GRAVIHEL Antisilicone cleaner	 GRAVIHEL Antisilicone cleaner	 GRAVIHEL Cleaner for plastics	<b>GRAVIHEL PUR WOOD PRIMER</b>
	 GRAVIHEL Antisilicone cleaner	 P220 – P280	 P220 – P280		 P360 – P600
		 GRAVIHEL Antisilicone cleaner	 GRAVIHEL Antisilicone cleaner		Dust free

**Typ of product:** Acryl – isocyanate  
**Appearance:** 421 – 011 DEEP MATT  
 421 – 012 SEMI MATT /SATIN

**Delivery viscosity:** Tixotropní  
 DIN 53211  $\Phi 4$  / 20°C  
**Density of component A:** 1,4 – 1,56 kg/l

**Solid content:** By volume: 45%  
By weight: 76%








**VOC:** 2004/42/II B(e)(840)650  
EU limit value VOC for this type of product (category II B (e)) in the form, which is ready for application is 840 g/l. VOC of this product, prepared for use is 650 g/l  
IT IS ALSO USED TO RENOVATE INDUSTRIAL AND COMMERCIAL VEHICLES






**Theoretical yield:** 4 - 5 m<sup>2</sup> /lit.

**Temperature resistance (dry temperature)** Short-term: up to 140 °C  
Long-term: up to 80 °C

**Processing temperature:** +10°C till max. +40°C, max. Humidity 75%

**Color shades:** GRAVIHEL COLOR TOOLS

	<b>Mixing ratio by Volume:</b>	2:1 + 20% GRAVIHEL 2K PUR HARDENER GRAVIHEL THINNER ESS  <b>DIRECT ADHESION ON GALVANIZED STEEL or ON ALUMINIUM</b> 4:1 + 35% GRAVIHEL 2K PUR SINGLE COAT HARDENER GRAVIHEL THINNER ESS						
	<b>Pot life of the mixture at 20°:</b>	4 h						
	<b>Viscosity (RFU):</b> DIN 53211 phi 4 / 20°C	22 - 28 sec. (depending on the gloss)						
	<b>Application with spray gun:</b>	1,3 - 1,7 mm 2 - 3 bar						
	<b>Number of layers:</b> <b>Film thickness:</b>	1 - 2 70 - 90 µm						
	<b>Flash-off:</b>	10 - 13 min. /20°C between coats						
	<b>Drying time:</b> <b>GTRAVIHEL THINNER ESS</b>	<b>Object temperature</b>	<b>at 20°C</b>	<b>at 60°C</b>	<b>at 20°C</b>	<b>at 60°C</b>	<b>at 20°C</b>	<b>at 60°C</b>
			<b>421 - 011 (2:1)</b>		<b>421 - 011 (4:1)</b>		<b>421 - 012</b>	
	<b>Powder dry:</b>	43 min.	-	1 h	-	45 min.	-	
	<b>Dry to touch:</b>	4,5 h	-	6 h	-	5 h	-	
	<b>Dry to assembly:</b>	6-8 h	30 min	7-9 h	30 min.	6-8 h	30 min.	
	<b>Through dry:</b>	12 h	30 min.	12 h	30 min.	12 h	30 min.	

	<b>Drying time:</b>  <b>GRAVIHEL 2K ADDITIVE</b>	<b>Object temperature</b>	<b>at 20°C</b>	<b>at 60°C</b>	<b>at 20°C</b>	<b>at 60°C</b>	<b>at 20°C</b>	<b>at 60°C</b>
			<b>421 - 011 (2:1)</b>		<b>421 - 011 (4:1)</b>		<b>421 - 012</b>	
		<b>Powder dry:</b>	34 min.	-	35 min.	-	35 min.	-
		<b>Dry to touch:</b>	1,5 h	-	1,5 h	-	1,5 h	-
		<b>Dry to assembly:</b>	2 h	30 min	3 h	30 min.	3 h	30 min.
		<b>Through dry:</b>	4 h	30 min.	5 h	30 min.	5 h	30 min.
	<b>Drying time (infra-red short-wave):</b>	8 - 12 min. Distance to the object: 70 - 80 cm						
	<b>Application with Airmix:</b>	0 - 10% (depending on the gloss) GRAVIHEL THINNER ESS Nozzle: 0,18 – 0,23 mm Pressure: 60 – 150 bar Flash-off between coats: 10 min. /20°C						
	<b>Brush application:</b>	Thinner is not needed!						
	<b>Shelf life:</b>	2 years						

FOR PROFESSIONAL USE ONLY - See Safety Data Sheet

2K materials react with humidity; take care that all containers and tools are absolutely dry. While coating, the ambient relative humidity should not exceed 80%.

The data may vary under various conditions.,

Any part of this information may change at any time without notice.

The information was derived from years of experience in the collaboration of Development and Technical Services and is the property of HELIOS Refinish.

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