



# TECHNICAL SHEET



Product name:

**DENAPOX Z**Page: 1/2  
Date: 13.4.2016

<b>Characteristics:</b>	Two-pack, fast-drying epoxy-acrylic primer		
<b>Description:</b>	Two-pack, water-thinnable, fast-drying anticorrosion primer containing zinc-phosphate, intended for the coating of steel and aluminum parts and structures.		
<b>Composition (general):</b>	The component DENAPOX Z contains special epoxy-acrylic dispersion, anticorrosion and color pigments, extenders, coalescent agents, soaking and dispergation agents, an antifoaming agent, rheology modifiers and other ingredients enhancing the properties of the substance. The netting agent DENAPOX TUŽIDLO (hardening agent) contains epoxy-resin emulsion		
<b>Application:</b>	It is used as an anticorrosion primer of steel parts and structures, in mechanical engineering, foundries and other branches of metal industry, in civil engineering and refurbishment and wherever high chemical resistance is required.		
<b>Colors:</b>	It is made according to RAL, EUROTREND, NCS, ČSN color charts or in the agreed shades, matte.		
<b>Properties:</b>	<b>Paint:</b>	<b>Hardenin g agent:</b>	<b>Hardened mixture:</b>
<b>Density (g/cm<sup>3</sup>):</b>	1.1 – 1.3	1.1	1.15 – 1.25
<b>Volume solids ONL (%):</b>	30 – 40	63.5	35 - 45
<b>Weight solids (%):</b>	40 - 50	67	45 - 55
<b>KU viscosity:</b>	80 - 90		
<b>Flow time by use of flow cups F6 (s):</b>	30 - 70		30 - 70
<b>pH (at 20 °C):</b>	7 – 10		7 – 10
<b>VOC (volatile organic compounds) (kg/kg):</b>	0.03 – 0.06	-	0.03 - 0.05
<b>0.006 TOC (total organic carbon content) (kg/kg):</b>	0.02 – 0.05	-	0.02 – 0.04
<b>Maximum permissible value of VOC content (g/l):</b>	140		
<b>Max. VOC content in the product in the ready-to-use condition (g/l):</b>	70		
<b>Water-thinnable paint category:</b>	A/j multiple-pack reactive coatings with a special function for specific purposes.		
<b>Appearance/color:</b>	liquid		
<b>Gloss value (at 60°):</b>	5 - 10		
<b>Pendulum hardness (2H/80 °C):</b>	min. 30 %		
<b>Miscibility:</b>	miscible with water		
<b>Adhesion by the grid-cutting method:</b>	degree 0 (cut edges are completely smooth and free of any defects)		
<b>Impact resistance:</b>	30 cm		
<b>Drying, degree 1 (surface dry):</b>	25 min		
<b>Drying time, degree 2 (dry to touch):</b>	30 min		
<b>Drying time, degree 4 (dry-through):</b>	45 min		
<b>Chemical resistance:</b>	weak acids and bases, diesel, motor oil, hydrogen peroxide, butyl glycol, Savo.		
<b>Substrate preparation:</b>	The substrate must be dry, free from rust and mechanical or greasy impurities. The most advisable cleaning method is blasting or surface phosphatizing.		
<b>Application conditions:</b>	The air and substrate temperatures during the application and drying of the paint shall not fall below +10 °C. At lower temperatures, the enamel does not create a perfect film and the quality and durability of coatings are reduced. The open time of the hardened paint is a max. of 12 hrs at 20 °C.		
<b>Thinning:</b>	The paint is prepared for direct application and it shall not be thinned before application.		
<b>Hardening:</b>	Prior to application, DENAPOX Z paint and DENAPOX TUŽIDLO (hardening agent) shall be mixed at the ratio of 100:5, while the hardening agent should be added to the paint during continuous stirring. The mixing shall be performed with a suitable stirrer (e.g. a drill with a stirrer). The mixing ratios of both the components can be changed upon agreement with the manufacturer on the requirements for the final properties of the coating.		



# TECHNICAL SHEET



Product name:

**DENAPOX Z**

Page: 2/2  
Date: 13.4.2016

<b>Recommended method of application:</b>	The paint shall be applied to the surface with a paint brush, a paint roller, by pneumatic paint spraying - Airless, Airmix, in one or more layers, with a time lag of at least 4 hrs. It is recommended that the method of application, the number and the thickness of layers always be discussed with the manufacturer.												
<b>Recommended coating system:</b>	<p>1 - 2 layers of DENAPOX Z, optimum paint thickness of 80 µm DFT, the re-spray interval with two layers is 4 hrs at 20 °C; if additional drying is employed at temperatures to 80 °C, the interval can be reduced up to 2 hrs.</p> <p>1-2 layers of DENAPUR, two-pack polyurethane enamel, optimum layer thickness of 80 µm DFT, the re-spray interval between the substrate and the enamel must be at least 4 hrs. If two enamel layers are employed, the coating interval is 24 hrs at 20 °C - if additional drying not exceeding 80 °C is employed, the interval can be reduced.</p> <p>The open time of the hardened mixture is a max. of 2 hrs.</p> <p>EPOXIDEN E or DENATOP P or DENATOP P/AU can also be used as top coats.</p> <p>The paints can be additionally dried at 50 - 80 °C.</p>												
<b>Spreading capacity and recommended thickness:</b>	<p>Theoretical consumption is 5 - 8 m<sup>2</sup> /kg at an optimum dry layer thickness of 50 µm.</p> <table border="1"><tr><td>Wet-film thickness WFT (µm)</td><td>120</td><td>180</td></tr><tr><td>Dry-film thickness DFT (µm)</td><td>50</td><td>80</td></tr><tr><td>Theoretical spreading rate (m<sup>2</sup>/kg)</td><td>7.25</td><td>4.60</td></tr><tr><td>Theoretical spreading rate (kg/m<sup>2</sup>)</td><td>0.14</td><td>0.22</td></tr></table>	Wet-film thickness WFT (µm)	120	180	Dry-film thickness DFT (µm)	50	80	Theoretical spreading rate (m <sup>2</sup> /kg)	7.25	4.60	Theoretical spreading rate (kg/m <sup>2</sup> )	0.14	0.22
Wet-film thickness WFT (µm)	120	180											
Dry-film thickness DFT (µm)	50	80											
Theoretical spreading rate (m <sup>2</sup> /kg)	7.25	4.60											
Theoretical spreading rate (kg/m <sup>2</sup> )	0.14	0.22											
<b>Packaging:</b>	Plastic containers weighing 0.8 - 200 kg.												
<b>Storage:</b>	<p>Store in original, well-closed containers in cool, dry and well-ventilated areas at a temperature from +5 to 25 °C. Protect from freezing. Keep the mixture separated from drinks, foodstuff, feedstuff and medicine. Store away from the reach of children.</p> <p>The shelf life is a minimum of 12 months from the date of manufacture. The product must not freeze.</p>												
<b>Disposal of packaging and waste:</b>	Product residues and contaminated packaging shall be disposed of as hazardous waste in accordance with the applicable regulations.												
<b>Safety and hygiene:</b>	When handling the product, observe the instructions provided in the safety data sheet. Observe the principles of personal hygiene. If on the skin, wash the affected areas with soap and water. If in the eyes: rinse with water. If swallowed, rinse mouth with water, do not induce vomiting. In case of health difficulties, seek medical attention.												
<b>Legislation, certificates, attestations, other tested parameters:</b>	See the Declaration of Conformity												