



# TECHNICAL SHEET



Product name:

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Date: 13.4.2016

<b>Characteristics:</b>	Priming anticorrosion two-pack epoxy paint		
<b>Description:</b>	Two-pack, water-thinnable anticorrosion primer containing zinc-phosphate, intended for the coating of steel and aluminum parts and structures.		
<b>Composition (general):</b>	It contains epoxy resin, pigments, extenders, additives and other ingredients enhancing paint properties.		
<b>Application:</b>	Anticorrosion primers for steel or aluminum parts and structures, in mechanical engineering and other branches of metal industry and wherever high corrosion and chemical resistance is required.		
<b>Colors:</b>	According to the color charts of RAL, EUROTREND, NCS, ČSN and according to customer requirements.		
<b>Properties:</b>	<b>Paint:</b>	<b>Hardening agent:</b>	<b>Hardened mixture:</b>
<b>Density (g/cm<sup>3</sup>):</b>	1.3 - 1.5	1.03-1.1	1.25 - 1.4
<b>Volume solids ONL (%):</b>	48 - 53	48	48 - 53
<b>Weight solids (%):</b>	60 - 65	65	68 - 65
<b>KU viscosity:</b>	80 - 110		60 - 80
<b>Flow time by use of flow cups F6 (s):</b>	30 - 50		10 - 30
<b>Flow time by use of flow cups F4 (s):</b>			30 - 120
<b>pH (at 20 °C):</b>	6 - 7	approx. 10	9 - 10
<b>VOC (volatile organic compounds) (kg/kg):</b>	0.072	does not contain	0.061
<b>0.006 TOC (total organic carbon content) (kg/kg):</b>	0.039	does not contain	0.033
<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>	83 g/l		
<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>	max. 15		
<b>Pendulum hardness (2H/80 °C):</b>	min. 30		
<b>Miscibility:</b>	The mixture is indefinitely miscible with water.		
<b>Adhesion by the grid-cutting method:</b>	degree 0 (cut edges are completely smooth and free of any defects)		
<b>Drying, degree 1 (surface dry):</b>	2 hrs		
<b>Drying time, degree 2 (dry to touch):</b>	6 hrs		
<b>Drying time, degree 6:</b>	2 hrs at 40 °C		
<b>Recoatibility:</b>	after 24 hrs (at 20 °C)		
<b>Final curing and the possibility of permanent load:</b>	7 days		
<b>Chemical resistance:</b>	resistant to mineral oils, lubricants and soft solvents, bases and acids		
<b>Temperature resistance:</b>	continuously 120 °C		
<b>Substrate preparation:</b>	The substrate must be dry, free from rust, scales and any mechanical and greasy impurities.. For the corrosion environments of C2, C3 and C4, the surface must be cleaned by blasting to the degree Sa 2 ½ according to ČSN EN ISO 8501-1 (welds and edges must be treated according to ČSN EN ISO 8501-3). Aluminum surfaces must be treated according to the ČSN EN ISO 12944-4 standard. For the corrosion environment C1, the substrate must be clean, dry, free from grease and rust residues and mechanically cleaned to the degree St 2 - St 3.  Previously painted surfaces must be cleaned and degreased and old, non-adherent coatings must be removed. To ensure the compatibility of the old and the new coats, it is recommended that you contact the manufacturer or perform test reference coating.		



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<b>Application conditions:</b>	<p>The air and substrate temperatures during the application and drying of the paint shall not fall below +10 °C. Relative humidity 30 - 70 %. The temperature of the substrate to be painted should be at least 3 °C above the dew point, while the temperature and relative humidity must be measured in the vicinity of the painted substrate. Lower temperatures, higher relative humidity and a thick layer of the coating film slow down the drying and curing of the coating film, which may result in troubles with the adhesion to the substrate or between individual coat layers.</p> <p>The recommended layer thickness is 80 µm.</p> <p>Prior to the application, the coating must be thoroughly mixed (no sediment can be left on the bottom), hardened or thinned.</p>													
<b>Thinning:</b>	<p>The paint is ready to be used directly using spray painting Airless, Airmix (can be thinned to 5 % with water as needed). For air spray painting, the paint must be thinned with water to 10 %. Only the hardened mixture can be thinned.</p>													
<b>Hardening:</b>	<p>100:18.5 with DENAS EPOXY Z TUŽIDLO (hardening agent)- The hardened mixture must be processed within 2 hours.</p>													
<b>Recommended method of application:</b>	<p>Air spray painting, Airless, Airmix</p>													
<b>Recommended coating system:</b>	<p>1x two-pack epoxy paint DENAS EPOXY Z. The next coating can be applied after 12 hrs of drying (at 23 °C). Drying and curing of the coat can be speeded up with additional drying at a temperature of 80 °C. Two-pack enamels DENAPOX E, EPOXIDEN E or DENAPUR are recommended as topcoats.</p>													
<b>Application data:</b>	<p>The paint is to be applied by air spray painting, Airless spray painting or Airmix spray painting (thinning data - see Thinning).</p> <p>The paint can be applied in one-layer - the optimum thickness of the film is 80 µm of a dry layer.</p> <p>The paint can be additionally dried at temperatures up to 60 °C; the additional drying speeds up paint curing and allows earlier application of the subsequent layer.</p> <p>The open time of the hardened mixture is 2 hrs.</p> <p>The paint features the final properties after complete curing, which is approx. 7 days.</p>													
<b>Spreading capacity and recommended thickness:</b>	<p>C3 environment: 80µm DFT priming coat + 40 µm DFT top enamel (durability up to 5 years); 80 µm DFT priming coat + 80 µm DFT top enamel (durability up to 10 years)</p> <p>C4 environment: 80 µm DFT priming coat + 80 µm top enamel (durability up to 5 years ); 160 µm DFT priming coat + 80µm DFT top enamel (durability up to 10 years)</p> <table border="1"> <tr> <td>Wet-film thickness WFT (µm)</td> <td>100</td> <td>160</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>7.70</td> <td>4.80</td> </tr> <tr> <td>Theoretical spreading rate (kg/m<sup>2</sup>)</td> <td>0.15</td> <td>0.25</td> </tr> </table>		Wet-film thickness WFT (µm)	100	160	Dry-film thickness DFT (µm)	50	80	Theoretical spreading rate (m <sup>2</sup> /kg)	7.70	4.80	Theoretical spreading rate (kg/m <sup>2</sup> )	0.15	0.25
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<b>Application data:</b>	<p><b>Data concerning conventional pneumatic spray painting</b></p> <p>Spray gun, for example EST 311, EST 314 or EST 115</p> <p>Nozzle according to the required performance 14 - 20</p> <p>Air pressure 2.5 - 3 atm.</p> <p><b>Data concerning the high-pressure spray painting Airless, e.g. VYZA VARIO 56-45 ( EST )</b></p> <p>Nozzle 0.011 inch (0.28 mm) or 0.013 inch (0.33 mm)</p> <p>Nozzle pressure 25 - 33 MPa (250 - 330 atm; 3600 - 4800 psi)</p> <p>Spray angle 20 - 60°</p> <p>Yellow gun filter 100/149 (mesh/µm), for the spray angle 60 °C red gun filter 200/74 (mesh/µm)</p>													
<b>Packaging:</b>	<p>To be agreed</p>													
<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>													



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<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 water and soap. In case of contact with eyes, rinse immediately with plenty of water, seek medical advice. If swallowed, rinse mouth with water, do not induce vomiting and get medical attention.
<b>Legislation, certificates, attestations, other tested parameters:</b>	See the Declaration of Conformity