

ZNR™ EP 1500

Solvent-free, Epoxy-Based Primer Resin

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| Product Description | Two-component, solvent-free, epoxy primer resin. Can be conveniently used indoors because it does not contain solvent and active materials. Provides perfect adherence on the applied surface, fills in capillary holes, and enhances impact resistance and chemical resistance of the applied surface. Additionally, provides adherence of additional layers. | | | | | | | | | | | | | | | | |
| Product Number | 402 | | | | | | | | | | | | | | | | |
| Areas of Application | <ul style="list-style-type: none"> For lining and coating of concrete surfaces, cement alums and epoxy mortars, On normal and highly absorbent surfaces, As primer and mid-layer coating for all ZNR Epoxy and Polyurethane Industrial Coatings, As binder for leveling mortars and mortar alums, On stable surfaces of the areas that do not contain dirt, have chemical durability and require resistance to ground finish coating. | | | | | | | | | | | | | | | | |
| Characteristics /Advantages | <ul style="list-style-type: none"> Multi-purpose. Can be used for repair purposes by adding high amount of filling in it. Can be used as top protective coating and varnish. High chemical and mechanical durability. Prevents dust emission on the applied surface. High adhesion strength. Short waiting time between layers. Insulates the applied surface thanks to its liquid impermeability. Volatile organic compound (VOC) free. Economic. | | | | | | | | | | | | | | | | |
| Brightness and Color | Transparent (yellowish) | | | | | | | | | | | | | | | | |
| Technical Data | <table border="1"> <tr> <td>Density</td><td>~1.15 gr/cm³ (23 °C)</td></tr> <tr> <td>Viscosity</td><td>80 – 110 KU (~ 1310 mPa.s)</td></tr> <tr> <td>Thinning</td><td>No</td></tr> <tr> <td>Solid Matter Content</td><td>100%</td></tr> <tr> <td>Pot life</td><td>~20 minutes (23 °C)</td></tr> <tr> <td>Superficial Dry Time</td><td>4-8 hours</td></tr> <tr> <td>Full-Dry Time</td><td>24 hours</td></tr> <tr> <td>Full Curing Time</td><td>7 days</td></tr> </table> | Density | ~1.15 gr/cm ³ (23 °C) | Viscosity | 80 – 110 KU (~ 1310 mPa.s) | Thinning | No | Solid Matter Content | 100% | Pot life | ~20 minutes (23 °C) | Superficial Dry Time | 4-8 hours | Full-Dry Time | 24 hours | Full Curing Time | 7 days |
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| Chemical Durability | <p>Durable against: Gas, Beer, Cyclohexene, Diesel Oil, Ethanol 10%, Ethylene glycol, Glycerin, Milk, Sodium Chloride Solution 3-30% Sodium Hydroxide 10%, Olive Oil, Paraffin, Petroleum, Castor Oil, Silicone Oil, Water and Soap.</p> <p>Partially durable against: Butanol, Ethanol, Methylisobutylketone, Perchlorethylene and Xylene.</p> <p>*Color change may be observed due to effects of chemicals. This study was held at room temperature. High temperature values and/or mix of chemicals may affect chemical durability.</p> | | | | | | | | | | | | | | | | |
| Surface Quality | <p>Concrete surfaces must be solid and have adequate compressive strength (minimum 25N/mm²) and tensile strength must be minimum 1.5 N/mm².</p> <p>Clean foreign materials such as dirt, oil, grease, coating, surface curing agents, etc. from the concrete, alum, plastered and metal surfaces. The surface should be clean and dry.</p> | | | | | | | | | | | | | | | | |
| Surface Preparation | <p>Highly glossy and glossy surfaces and/or surfaces with concrete hardener should be prepared in a way to obtain an open porous surface as a result of removing the cement slurry from the concrete surface using abrasive equipment.</p> <p>Remove loose and poor parts on the concrete surface and completely open birds-eye spaces, holes and cracks. All dirt and loose parts should be removed from the surface using preferably vacuum cleaner and/or cleaning brush before application of ZNR EP 1500. Apply ZNR EP 1500 on all surfaces that are ready for application using a roller and/or brush. Repair and level the pits, cracks, fractures and birds-eye holes on the concrete and alum surfaces after 4 - 8 hours (do not exceed 24 hours) by mixing quartz sand with 0.1-0.3 mm granulometry into ZNR EP 1500. Solvent-free epoxy impregnate must be applied on concrete or alum surfaces and/or the surface must be leveled in a way to obtain a smooth surface.</p> | | | | | | | | | | | | | | | | |

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| Application Conditions and Limitations | Surface moisture content: moisture content <4 % unit by weight. Relative air humidity should be maximum 80%. Dew point. Pay attention to condensation! In order to reduce the risk of condensation or bubble occurrence on ground topping, temperature of the surface and non-cured ground should be minimum 3°C above the dew point. |
| | Surface Temperature Minimum +10°C, Maximum + 30°C Ambient Temperature Minimum +10°C, Maximum + 30°C Material Temperature Minimum +10°C, Maximum + 30°C |
| Mixing Tools / Mixture | ZNR EP 1500 should be thoroughly mixed using a low speed (300 - 400 cycles/min) electric mixer or another suitable equipment. After pouring Component B into Component A completely, mix for 2 minutes continuously until a homogenous mixture is obtained. After mixing components A and B, add 0.1 - 0.3 mm quartz sand and, if necessary, other fillings and mix for 2 minutes until a homogenous mixture is obtained. In order to be sure that the mixture is ready, take the materials to another container and mix for 1 minute until a proper mixture is obtained. Avoid mixing too much in order to minimize air entrainment. |
| Application Method / Equipment | Confirm that surface moisture content, relative humidity and dew point requirements are met before the application. If moisture content is > 4% unit by weight. Primer As primer: Make sure that continuous and nonporous coating covers the surface. Apply two layers of primer, if required. Apply ZNR EP 1500 using a brush, roller or rake. Leveling Mortar It is necessary to level the rough surfaces firstly. Apply leveling mortar using a trowel/rake depending on the required thickness. Mortar Coating / Repair Mortar Properly apply the mortar on the primer that is still wet using leveling laths and, if necessary, coating boards. After a short waiting time, compress and level the surface using a trowel or buffing machine (20-90 cycles/min in general). |
| System Structure | Primer Low/Medium grade porous concrete : 1 x ZNR EP 1500 High grade porous concrete : 2 x ZNR EP 1500 Suitable leveling mortar (surface roughness < 1 mm) 1 x ZNR Primer 1500 + quartz sand (0.1 - 0.3 mm) Mortar Alum (15 - 20 mm layer thickness) / Repair Mortar Primer: 1 x ZNR EP 1500 +special sand mix |
| Package | (A : 15 kg B : 5 kg) 20 kg ready-to-use sets |
| Shelf Life | Shelf life is 1 year from the date of manufacture if stored properly at a temperature between +5°C and +30°C and away from direct sunlight. |
| General Matters | Abovementioned product data and descriptions are prepared for guiding purposes as a result of our experiences and diligent studies. We, individually, can not control or affect the variety of the related materials and various construction and working conditions. Warranty is limited to only quality of the purchased material for the applications that are not under our control. No warranty is committed for application, but only for product manufacturing. This technical flyer overrides former flyers. Quality of the work may vary depending on how professionally the product is used. In case of hesitation, please perform a small test or ask for technical help. |
| Disposal | Empty packings can be disposed to collection bins according to regional/local regulations or recycling rules. Dispose used waste materials as construction waste materials after drying and hardening. It is dangerous to dispose by burning the product remnants. |
| Safety Information | Keep the products out of reach of children. Keep the lids of the products closed. It is recommended to use gloves and goggles during application. In case of contact with skin, wash immediately with soap. In case of contact with eyes, immediately consult a doctor. For more information, please refer to the material safety data sheet. |