

neoron | GLAZE

General information

NeoronGLAZE is a unique, thermosetting thermoplastic coating that offers the unique combination of superior chemical resistance, adhesion and mechanical properties – especially toughness.

NeoronGLAZE provides extreme abrasion and chemical resistance for demanding applications, such as heavy-duty floors, and resistance to heat, such as in industrial kitchens. Due to excellent adhesion, it can be applied on composites, concrete, PVC, aluminium and other metallic substrates. However, the right choice of primers is recommended to get the best compatibility.

NeoronGLAZE is fully compatible with polyurea and is the best choice to protect polyurea coatings from weather and strong chemicals. After curing, the surface is smooth and provides excellent ductility.

For heavy duty industrial applications, 1-component, baked curing version (NeoronGLAZE 700) is recommended. After overnight drying, post-curing at 170°C for 20 minutes is needed. This will provide ultimate adhesion, abrasion and chemical resistance.

NeoronGLAZE is available in all RAL colours and transparent lacquer.

Key properties

- ✓ very high molecular weight backbone
- ✓ excellent adhesion
- ✓ excellent heat, chemical, corrosion and weathering resistance
- ✓ smooth finish
- ✓ excellent easy-to-clean properties
- ✓ keeps its elasticity at cold conditions

General properties

- ✓ brush or trowel applicable
- ✓ 2-component, solvent based thermosetting system for RT curing
- ✓ 1-component, solvent based thermosetting system for baked curing
- ✓ wide application window

Applications

- ✓ industrial, heavy-duty applications
- ✓ pools, troughs
- ✓ topcoat for polyurea
- ✓ indoor and outdoor

Other information

Taber abraser test was implemented according to ASTM D 1044. One cycle equals 1000 revolutions with a weight of 250g.

	<i>NeoronGLAZE + Neoron Curing Agent S</i>		<i>2-component, solvent borne polyurethane coating</i>	
<i>mass lost</i>	mg	%	mg	%
<i>cycle 1</i>	0,15	0,025	6,9	0,76
<i>cycle 2</i>	1,4	0,23	12,1	1,3
<i>cycle 3</i>	5,5	0,91	51,4	5,6

Following chemicals were tested and the appearance was checked visually.

Condition	Performance (curing at RT 10 days) NeoronGLAZE + NCA H	Performance (curing at 170°C 20 mins) NeoronGLAZE 700
Fresh Water - Long Term	Excellent	Excellent
Salt Water - Long Term	Excellent	Excellent
Hydrocarbons (Gasoline and Oil) – Long Term	Excellent	Excellent
Detergent Oils and Aircraft Oils – Long Term	Excellent	Excellent
Strong Solvents (Aromatics, Ketones, Alcohols) – Long Term	Excellent	Excellent
Inorganic Acids	Excellent, except for strong nitric acid	Excellent
Organic Acids	Fair, limited use only	Excellent
Alkalis	Excellent	Excellent
Steam Processing (90 mins, 121°C)	Excellent	Excellent
Stain Resistance (1)	Excellent	Excellent
Stain Resistance (2)	Excellent	Excellent
Stain Resistance (3)	Excellent	Excellent
Cigarette Burn Resistance	Excellent	Excellent

- (1) For example, food spillage or cleaning with liquid detergents
- (2) For example, continuous or frequent exposure to coffee or tea
- (3) Ethanol containing materials

Salt Fog/Spray EN ISO 9227, substrate: zinc phosphate steel, preparation: activation with Fresh SA-2. Exposure time: 1500 hours. No visual change in gloss or colour.

Weathering test EN ISO 4892, substrate: epoxy/glass fiber laminate, preparation: moderate sanding. Exposure time: 4500 hours. No cracking or delamination. Minor decrease in gloss.

Usage

The working temperature should be 15 – 24°C and ambient humidity 60 – 80%.

2-component system is supplied with curing agent part. Add the curing agent accordingly. The mixing ratio is given in the label. The product is ready to use but can be diluted with Solvent 45 if required. Working time is 2 to 3 hours depending on the ambient temperature and moisture.

NeoronGLAZE 700 is one component system and ready to use as is but can be diluted with Solvent 45 if required.

Apply with a brush, preferably several thinner layers approx. 0,5 mm (wet) each. 2 – 3 layers are recommended to get best performance. The wait between layers should be 12 - 16 hours depending on the surrounding conditions.

Safety and Handling

The content of an opened package is influenced by ambient humidity. Keep tightly capped when not in use. Handle in a well-ventilated area. Store at room temperature in the original containers kept tightly closed. Protect from direct sun light. Detailed safety information is contained in a material data safety sheet.