PHOENIX 2K Resin Product Data Sheet

Rev. 6 - December 2019



Product Description

PHOENIX 2K Resin is a cold-applied, reactioncuring polyurethane bitumen product consisting of PHOENIX 2K Resin, Components A and B mixed in a volume ratio of 1:1 in specially designed mixing and application equipment, PHOENIX Pumps.

Due to its water-resistant properties this product is highly suitable for a range of jointing applications including areas with high ground water tables and other moulding applications where corrosion protection is high priority.

PHOENIX 2K Resin is specially formulated to be used as outer protection (corrosion and moisture) for high-voltage joints.

Delivery

All products are delivered in 10 or 20 litre cans or packed customized for specific purposes.

Application

Before application both components must be stirred seperately.

Component A and B are then mixed in the specially designed PHOENIX Pump in a 1:1 volume ratio. Application speed varies from 2 to 7 litres per minute depending on the specific task and choice of PHOENIX Pump.

Equipment

There are various PHOENIX Pumps for product application and the choice of equipment depends on the project in question.

The pump is either leased or bought, and operator training is part of the service provided by PHOENIX INTERNATIONAL A/S.

Cleaning

Cleaning of the PHOENIX Pump equipment is very easy. Simply discard the nozzle before application - making the system easy to use.

Storage

The cans must be stored out of direct sunlight and at a maximum temperature of 40°C. The shelf life is two years from date of delivery.

Standards

PHOENIX 2K Resin has been tested and approved in accordance with ISO EN IEC 60840.

Quality Control

Quality control is carried out at the PHOENIX INTERNATIONAL A/S laboratory. All products are tested and test certificates are issued on request.



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		Technical Data	
Property	Unit	Unit	Methods
Density	g/ml	1.01	PHOENIX 11.00.012
Colour	-	Black	-
Fire class	-	none	-
Cleaning	-	Oil remover, water and soap, mechanical removal	-
Potlife	min.	approx. 50	PHOENIX 9.00.002
Hardness, 24 h	Shore A	approx. 30	DIN 53505 (6.87)
Hardness, cured	Shore A	approx. 60	DIN 53505 (6.87)
Curing time	hr	approx. 48	-
Exotherm	°C	approx. 60	volume 120 L
Tensile strength	N/mm ²	approx 3.0	DIN 53455 (8.81)
Elongation	%	approx. 300	DIN 53455 (8.81)
Water absorption 50°C, 56 days	%	0.91	PHOENIX 9.00.001
Fuel resistance, change in mass isooctane/toluene diesel	%	+3.9 +2.3	SS-S-200- (8.88)
Chemical resistance: (change in weight) Air Water, neutral Water, pH10 Water, pH>13	%	- 0.25 0.0 - 0.25 - 0.25	-
Corrosion test, 1000 h Saltwater fog	-	No change with a coating of 20-25 mm. After expoure the steel looks exactly like before	ASTM B 177-73
Hydrolysis resistance: Tensile strength Elongation Shore A	% of initial value	approx. 84 approx. 88 approx. 94	VDE 0291, Teil2-97
UV-resistance, 1000 h	-	The compound turns slightly grey and some erosion <1mm may appear in the surface	ASTM G-53-93
Heat transferability	mW/m*K	approx. 153.5	DIN 52 612-79
Coofficient of Thermal Expansion	10 ⁻⁶ /°C	202.6	ASTM E831 - 06
Specific Heat	J/ <i>g</i> K	1.389	ISOMET 2104
Electrical Permittivity	-	20 °C: 3,17 – Loss Factor: 2,33x10 ⁻² 80 °C: 4,18 – Loss Factor: 2,58x10 ⁻¹	DIN EN 0303-4
Dielectric strength	kV/mm	>20	ASTM D 149-93a
Volume resistivity ½ min. dry 1 min. dry 5 min. dry	Ohm x cm	$\begin{array}{c} 1.2 \times 10^{14} \\ 1.5 \times 10^{14} \\ 2.1 \times 10^{14} \\ 2.1 \times 10^{14} \end{array}$	ASTM D 257-93
Application temperature	°C	Between 5 - 30	ASTM B 177-73

corrosion protection that stays.