Product Data Sheet
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Construction

Inertol Poxitar® F

Epoxy-Tar-Oil-Combination. Heavy Duty Coating for Steel and Concrete

Product Description	**Inertol Poxitar® F** is two-pack reaction hardening coating of low solvent content based on a epoxy-tar-oil-combination with mineral fillers. Approved and listed by Federal Department of Hydraulics (BAW).
Uses	For concrete and steel, as internal and external coating for buried and submerged structures, e.g. sewerage systems, chemical industry etc. Also suitable, if an application onto damp surfaces (steel and concrete) is inevitable. **Not suitable for surfaces in contact with drinking water, housing, stables etc.**
Advantages	After complete curing **Inertol Poxitar® F** is tough hard, robust, abrasion and impact resistant; excellent resistance to water, microbes and chemicals. **Inertol Poxitar® F** can be exposed to water immediately after application, taking into consideration that thus solvents get into the water which leads to temporary contamination. Not resistant to mechanical exposure (waves) whilst still soft. Immediate exposure to water should therefore only be considered in special cases and after consulting the authorities for the protection of environment.

Product Data

Type	Tar-Oil-Epoxy Resin
Colours	Black, tinted red
Packaging	**Inertol Poxitar® F**: 35 and 17 kg net. Thinner S: 25, 10 and 3 ltr. Friazinc R: 26; 15 and 7 kg net. Thinner K: (for Friazinc R): 25; 10 and 3 ltr.
Storage Condition	Store in a dry and cool environment between 5ºC and 35ºC away from direct sunlight.
Shelf life	Minimum 12 months from production date if stored in original, unopened packaging

Technical Data

Mixing ratio	85 : 15 by weight
Pot life	At + 20°C approx. 1½ hours

Consumption:

	specific gravity of liquid. approx. kg/ltr.	solid content approx. %		Theoretical layer thickness with a consumption of 100 gm/m²		Material consumption with 20% loss for medium dry film thickness of	
		By vol.	by weight	wet µm	dry µm	µm	approx. kg/m²
Inertol Poxitar® F	1.8	87	96	56	49	150	0.310
Friazinc R	2.8	67	90	36	24	60 80*	0.250 0.340

* when spraying.
Apart from small areas the dry film thickness of Friazinc R should not exceed 150 microns per layer.

Coating system

Steel:
2 - 3 x **Inertol Poxitar® F**; preferably alternating colour shades.
For heavy mechanical exposure priming with Friazinc R is recommended.
Concrete:
2 - 3 x **Inertol Poxitar® F**
1st coat to be thinned with maximum 5% by weight Thinner S.
2nd coat unthinned.

Resistance:

Chemical influences:
Inertol Poxitar® F is resistant to water, seawater, barnacles, diluted acids and lyes, neutral salts, mineral and fatty oils, detergents etc.
Not resistant to longer exposure to benzene-hydrocarbons and tar oil.
Temperature:
Dry heat up to approximately + 100°C, damp heat and hot water up to approx. + 60°C, short time exposure up to approx. + 80°C; not resistant to hot water exposure in case of significant differential of temperature gradient.

Application

Surface preparation:

Concrete:
Dry, solid and gripping, free of laitance, dust, loose and friable particles and other contamination.
Sweep blasting increases adhesion. This is particularly important in case of underwater exposure. Large holes, holidays and cavities etc. should be levelled up with suitable Sika repair mortars.
Steel:
Blastcleaning to Sa 2½ according to ISO 12944, part 4.
Free of dirt, oil, fat etc.

Mixing

Stir part A (base component) thoroughly, add part B (hardener) and mix thoroughly with an electric stirrer (with up and down movements).
In case of crystallization of part B (hardener) liquify same in a warm water bath to + 40° to + 50°C and let it cool down to a normal temperature before mixing with part A (base component).

Application

The method of application has got a major effect on achieving uniform thickness and appearance. Spray application will usually give the best results. The indicated dry-film thickness is easily achieved by airless spray and usually also achievable by brush. Adding solvents reduces the sag resistance and the dry-film thickness. In case of application by roller, sometimes also by brush, additional applications may become necessary to achieve the required coating thickness, depending on type of construction, site conditions, colour shade etc. Before starting major coating operations, it may be useful to check with a test application on site whether the selected application method with the specified product will provide the requested results.

By brush or roller:

No solvents should be added, as they would delay curing, especially under water.

Airless-Spray application:

Spray pressure in gun min.150 bar, diameter of hose min. 8 mm, nozzle bore 0,53 - 0,66 mm, spray angle 40 - 80°.

At low temperatures maximum 5% by weight Thinner S may be added, but an immediate exposure to water is then not possible.

Application temperature:

Minimum + 5°C.

Under unfavourable conditions, e.g. influence of air humidity into the fresh coating, surface damages (brown discolouration) and possibly little alligatoring might occur. However, these will have no effect on performance.

Waiting Times between the coats

Product	Waiting time	+5°C after	+10°C after	+15°C after	+20°C after	+25°C after	+30°C after
Inertol Poxitar F	.Min	hr 36	hr 30	hr 24	hr 12	hr 8	hr 6
	.Max	hr 96	hr 72	hr 60	hr 48	hr 36	hr 24

If these maximum waiting times cannot be observed, intercoat adhesion problems must be expected and activation will have to be carried out. The best method of activation is sweep blasting or grinding, followed by thorough de-dusting prior to application of the next coat.

Friazinc R and **Inertol Poxitar® F**: 24 hrs at 20°C (see technical data sheet).

Final drying time

At + 20°C and good ventilation, final curing is achieved after approximately 8-10 days.

Curing also takes place at lower temperatures (below + 10°C) but it takes longer (also under water curing).

Curing also takes place under water..

Cleaning:

Clean all tools and equipment immediately after use with Thinner S.

Notes

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

Safety

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

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Legal Notes

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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