

## **EUXIT 50**

### **Description**

Solvent free , non-pigmented ,two component preparation of liquid epoxy resin base , with formulated amine hardeners .

### **Fields of application**

**EUXIT 50** is particularly suitable for filling cracks and joints of all kinds, for strong jointing of concrete sections, of new concrete on to old concrete ,and iron to concrete .

Because of its low viscosity , **EUXIT 50** can be mixed with considerable amounts of mineral filler (aggregates). It is therefore , especially suitable as filler compounds, repair and synthetic mortars for strong jointing , or as inner linings for heavy static loads.

Also because of its low viscosity, **EUXIT 50** has a good penetration potential on porous surfaces and is therefore most suitable as primers under solvent free coating preparations .**EUXIT 50** is a special sealing compound for capillary ,sealing of concrete bearers under asphalt track surfaces .

### **Characteristics**

**EUXIT 50** is primarily low viscosity (highly fluid) special mixture with high capillary action , which penetrates into the smallest capillaries and pores. When fully hardened, it is water-and weather-proof ;resistant to waste and sea water, Alkalis , diluted acids saline solutions, greases, fuels and mineral oils .

**EUXIT 50** is particularly free of yellowing .

**EUXIT 50** is unaffected by constant temperatures and temperature variations in the range from-30oC to + 100oC dry heat, and up to + 50oC wet heat. The mixed preparations can stand up to + 150oC dry heat and up to + 80oC wet heat. For brief periods the mixtures can be subjected to 50% higher temperatures .

**Technical data:**

	<b>EUXIT 50</b>	<b>EUXIT 50 Mortar 1:9</b>
<b>Viscosity at 20 oC cps</b>	300	---
<b>Specific gravity at 20 oC (g/cm<sup>3</sup>)</b>	1.05	2.1
<b>Mix ratio (by weight)</b>	3:1	---
<b>Mix ratio (by volume)</b>	5:2	---
<b>Pot life at 10 oC (hours)</b>	1 ½	10
<b>Pot life at 20 oC (hours)</b>	1	4
<b>Pot life at 30 oC (hours)</b>	¼	1
<b>Minimum hardening temperature oC</b>	8	10
<b>Bone dry at 20 oC (hours)</b>	2	8
<b>Thorough hardened at 20 oC (days)</b>	7	7
<b>Re-workable at 20 oC (hours)</b>	Immediately	12-24-12
<b>Volume shrinkage (%)</b>	3.5	0.35
<b>Linear shrinkage</b>	0.3	0.03
<b>Hydrolysis count DIN 53401</b>	0	---
<b>Impact hardness konig (sec)</b>	140-160	---
<b>Pencil hardness</b>	2 H	---
<b>Erichsen indentation (mm)</b>	2	---
<b>Abrasion DIN 52108(cm<sup>3</sup>/50 cm<sup>2</sup>)</b>	3	---
<b>Compression (N/mm<sup>2</sup>)</b>	85	120
<b>Bending property (N/mm<sup>2</sup>)</b>	45	36
<b>E-module (N/mm<sup>2</sup>)</b>	2800	24000
<b>Breaking tension (%)</b>	4	---
<b>Revers. Compression at 15 N/ mm<sup>2</sup>) load (mm/m%)</b>	0.5	0.06
<b>Glass temperature oC</b>	57	100
<b>Adhesion to concrete after storage</b>	Concrete	Concrete
<b>At temperature changes</b>	Fracture	Fracture
<b>Expansion coefficient (X 10<sup>-6</sup>)</b>	70	20
<b>Shelf life</b>	Up to 1 year.	
<b>Colour</b>	Colourless	Colourless
<b>Complies with ASTM D-543. ASTM C 881-87</b>		

**Surface preparation:**

Cement bound surfaces must be dry, firm, offer good traction and be free from grout, dust and dirt particles, and additionally be free of oil, grease and other impurities which can adversely affect uniform adhesion . If considered necessary the surface should be sand blasted , flame scaled, faced or ground.

Iron and steel must be free of rust and scale free, free of oil, dust, grease and other impurities. The best surface preparation is sand blasting.

**Application   Joining cracks :-**

Joining cracks and joints in concrete .  
See specification sheet "compression of cracks"

**Small holes :-**

Filler compound for leveling small holes and contractions in horizontal concrete surfaces, for smoothing over sand blasted roughness, and also to join concrete to concrete and iron to concrete. Filler compound to be prepared from :

- 1 part (by volume) **EUXIT 50** (1 liter = 1 kg)
- 1 part (by volume) fire dried quartz sand 0,06 - 0,2 mm (1 liter approx. 1,5 kg) .
- 1 part (by volume) thickening agent

Material consumption approx. 500 - 600 g **EUXIT 50** /m<sup>2</sup> and

1mm coating thickness .

### **Cementing fresh concrete onto or with old concrete:**

If necessary , sandblast , flame scale or grind the top surface.  
Apply **EUXIT 50** to the surface to be joined. Minimum consumption :

approx. 500 g / m<sup>2</sup> Preparing the cement mortar. Water-cement factor maximum 0,6 .Apply the mortar to the still sticky **EUXIT 50** and compress. Time between the application of **EUXIT 50** and the application of

cement mortar from 1/2. up to a maximum of 5 hours at 20oC.

Synthetic resin mortar 1 : 9 - 1 : 15 :

Apply **EUXIT 50** as primer

Consumption approx. 200 - 300 g/m<sup>2</sup>

Preparation of synthetic resin mortar .

For coatings of 5-10 mm thickness :

1 part (by weight) **EUXIT 50**

9 parts ( by weight) according to application, fire dried additives of

7,5 % weight quartz powder (approx. 50)

37,5% weight quartz sand (0,06 - 0,2 mm)

55,0% weight quartz sand (0,7 - 1,2 mm)

Material consumption 150 - 200 g **EUXIT 50** / m<sup>2</sup> and mm coating thickness, depending on proportion of additives .

For manual application mortar ratio of 1 : 9 is suitable .Mortar which is to be compressed by finisher should have a mixing ratio of 1 : 12 - 1 : 15 of the same screening .

For coatings of 8 - 15 mm thickness :

1 part (by weight) **EUXIT 50** and

15 parts fire dried additives of :

1 part quartz sand (0,06 - 0,2 mm)

1 part quartz sand (0,2 - 0,7 mm)

1 part quartz sand (2,0 - 3,5 mm)

Material consumption approx. 150 g **EUXIT 50**/m<sup>2</sup> and mm coating thickness .

For coatings of 15 - 30 mm thickness :

1 part (by weight) **EUXIT 50** and

20 parts (by weight) fire dried additives of :

1 part quartz sand (0,06 - 0,2 mm)

1 part quartz sand (0,7 - 1,2 mm)

1 part quartz sand (4 - 8 mm )

Material consumption approx. 100 g **EUXIT 50** / m<sup>2</sup> and mm coating thickness .

To improve the non-skid properties , a fine sand may be

sprinkled (granulation 0,09 - 0,2 mm or 0,2 - 0,7 mm). Best applied with a sand blasting appliance. If repair mortar or synthetic resin mortar have to be coated over with a pigmented preparation such as **EUXIT 60** , then the freshly applied mortar must definitely be sprinkled with fire dried quartz sand , granulation 0,2 - 0,7 mm (to improve the intermediate adhesion).