EUROKOTE® 468 Thixo 500
Data Sheet

DEFINITION
EUROKOTE® 468 Thixo 500 is a solvent-free, benzyl alcohol-free and VOC (volatile organic compounds)-free two component epoxy binder.

SCOPE OF USE
Anti-corrosion coating to protect steel and concrete substrates in contact with drinking water, food, sea water, raw water and industrial water.
Maximum service temperature immersed in water: 50°C.

STANDARDS
- Steel

EUROKOTE® 468 Thixo 500 meets the requirements of the European standard EN 10339.

- Concrete

EUROKOTE® 468 Thixo 500 meets the requirements of the standard NF EN 1504-2 (Products and systems for the protection and repair of concrete structures) and therefore has CE marking when it is used in the following complexes:
- EUROKOTE® 468 Thixo IMPER (BLUE and IVORY)
- EUROKOTE® 468 Thixo ETANCHEITE 450 (BLUE and IVORY)
- EUROKOTE® 468 Thixo ETANCHEITE 800 (BLUE and IVORY)

APPROVALS
Drinking water

EUROKOTE® 468 Thixo 500 is a material which can come into contact with drinking water in accordance with legislation in the following countries:
- France (ACS) for the Red/Brown, Ivory and Blue colours.
- UK (WRAS up to 60°C) for the Red/Brown colour
- Spain (RD 140/2003, RD 886/2008, RD 118/2003 and EU n°10/2011) for the Red/Brown colour

Food

In its “Ivory” and “Blue” version, its composition complies with the latest legislation in force, authorising it to come into contact with food (IANESCO test report). Contact us.

FEATURES
Number of components	: 2
Dry film colour	: Red/brown, Ivory, Blue
Dry film appearance	: Glossy
Density at 23°C	: Around 1.2 g/ml
Calculated dry weight (by volume)	: 100%

NOMINAL DRY FILM THICKNESS
EUROKOTE® 468 Thixo 500 is designed to be applied in a single layer with a dry film thickness range between 300 and 800 µm. The final thickness will be determined by the usage specification and method of application. Contact us.

THEORETICAL PERFORMANCE
Brush/roller example at 300 microns DFT	: 2.7 m^2/Kg i.e. 3.3 m^2/l
Airless sprayer example at 800 microns DFT	: 1 m^2/Kg i.e. 1.25 m^2/l

THEORETICAL CONSUMPTION
Brush/roller example at 300 microns DFT	: 0.37 Kg/m^2
Airless sprayer example at 800 microns DFT	: 1 Kg/m^2

DRYING TIME (for 800 µm DFT)
	at 10°C	at 20°C	at 40°C
No dust	20 hours	12 hours	6 hours
Hard dry	60 hours	32 hours	16 hours
Fully dry*	20 days	10 days	5 days

* Depending on the application, environment and system composition parameters

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OVERLAY TIME (on itself, nominal thickness)
At 20°C: Min: 24 hours - Max: 15 days

CLEANING SOLVENT
DILUENT 011.02

STANDARD PACKAGING
3 x 700 kg R+D barrels.
Other specific packaging is available depending on the equipment used for application.
For other packaging, contact us.

STORAGE
Shelf life: For standard packaging, 12 months sheltered at a temperature between +5°C and +35°C in original unopened packaging.

HEALTH AND SAFETY
Flash point: Part R: FP > 100°C - Part D: FP > 100°C

Before use, please read the regulatory label on the packaging and the safety data sheet.

SPECIFIC RECOMMENDATIONS
In the event of contact with drinking water and food, it is necessary to rinse with water before initial use in accordance with client recommendations.

CURED COATING PROPERTIES

Physical and mechanical properties	Standards	Substrates	Thickness	Results
Electrical non-porosity at 20°C, 8V/µm	EN 10289	Steel Sa 2 ½	400 µm	No porosity
Pulling adhesion at 20°C	ISO 4624	Steel Sa 2 ½	400 µm	≥15 MPa
Cross adhesion at 20°C	ASTM D 3359	Steel Sa 2 ½	400 µm	Class 5A
Cross adhesion at 20°C	EN 10339	Steel Sa 2 ½	400 µm	Level 1
Shore D hardness at 20°C	ISO 868	Steel Sa 2 ½	400 µm	≈ 70
Buchholz hardness at 20°C	ISO 2815	Steel Sa 2 ½	400 µm	≥ 90
Flexibility	EN 10289	Steel Sa 2 ½	400 µm	≥ 1.5%
Elastic modulus	ISO 1184	Free film	1000 µm	≈ 300 N/mm^2
Elongation at break at 20°C	ISO 1184	Free film	1000 µm	≥ 5%
Breaking stress at 20°C	ISO 1184	Free film	800 µm	≈ 20 N/mm^2
Chemical resistance examples*				
Cathodic disbondment after 28 days at 23°C	EN 10289	Steel Sa 2 ½	400 µm	≤ 10 mm
Permuted water resistance at 50°C for 3000 hours	ISO 2812-2	Steel Sa 2 ½	400 µm	No alteration
Salt spray resistance 1000 hours	NF EN ISO 9227	Steel Sa 2 ½	400 µm	No alteration
5% NaCl salt water resistance for 100 days at 50°C	ISO 2812-1	Steel Sa 2 ½	400 µm	No alteration
pH≤13 caustic soda solution resistance at 20°C	ISO 2812-1	Steel Sa 2 ½	400 µm	No alteration
Demineralised water resistance	AWWA C210	Steel Sa 2 ½	400 µm	No alteration
Specific insulation resistance - after 70 days at 23°C - after 100 days at 23°C - Rs 100 days/Rs 70 days ratio	EN 10289	Steel Sa 2 ½	400 µm	> 10^7Ω.m^2 > 10^7Ω.m^2 > 0.7
Resistance to 1% sulfuric acid	AWWA C210	Steel Sa 2 ½	400 µm	No alteration
Resistance to 1% caustic soda	AWWA C210	Steel Sa 2 ½	400 µm	No alteration

* For other products and temperatures, contact us.

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MIXING RATIO

MIXING RATIO	IN VOLUME	IN WEIGHT
Epoxy resin (part R)	100%	70%
Hardener (part D)	50%	30%

APPLICATION

- Concrete substrate (water tower, reservoirs, etc.): refer to the latest CCT in force "Inner protection of concrete reservoir to store drinking water"
- Steel substrate: tank, reservoirs, refer to the latest DTA no. 1 in force
- Steel substrate: pipes and accessories, refer to the latest DTA no. 2 in force

INITIAL USE

The initial use times are linked to the ambient temperature and the substrate temperature, which determine the hardness of EUROKOTE® 468 Thixo 500.

On an indicative basis and for a relative max. humidity of 85%, the curing times before initial use will be a minimum of:

- 20 days at 10°C (minimum drying temperature)
- 10 days at 20°C
- 5 days at 40°C

The results above regarding product properties were obtained either in our laboratories or in the official laboratories; as they do not take specific usage conditions into consideration, they are provided for information purposes only. Product characteristics defined in this data sheet can be modified at any time in view of changes to techniques and regulations, and therefore they are only valid if not superseded by a more recent version. Users must consult the most recent version of the data sheet corresponding to the product in question, which will be provided to them on request.