

Two component solvent free coal tar epoxy resin coating system.

Description

YASH EPO COAT 504 is a two component, solvent free, polyamide coal tar epoxy. The product has excellent water and chemical resistance properties which makes it particularly suitable for aggressive environments such as sewage treatment plants and sewage manholes.

YASH EPO COAT 504 is suitable for use on concrete and steel surfaces.

Applications

YASH EPO COAT 504 provides chemical and abrasion resistance to prevent corrosion of concrete and steel substrates.

Typical applications include:

- Seawater tanks, channels and intakes.
- Manhole linings.
- Sewage and effluent plants.
- Chemical processing areas.
- Building foundations waterproofing.
- Jetties, piers and docks.

*Not suitable for surfaces in contact with drinking water.

Advantages

- Excellent adhesion to concrete and steel surfaces. Cost effective; does not require a primer. Suitable for use as waterproof coating.
- High chemical resistance.
- Does not support bacterial growth.
- High abrasion resistance.

Can be applied to green concrete.

Technical Properties:

Colour:	Black	
Mixed density:	1.3 ± 0.05 g/cm ³	
Solids by weight:	100%	
Pot life:	50 - 70 min @ 25°C	
	25 - 35 min @ 40°C	
Tack free time:	3 - 4 hr @ 25°C	
	1 - 2 hr @ 40°C	
Over-coating time:	6 - 12 hr @ 25°C	
	4 - 8 hr @ 40°C	
Curing time @ 25°C:	1 day for foot traffic	
	7 days for full chemical	
	cure	
Water absorption	< 0.01%	
ASTM D570		
Water permeability:	Nil	
DIN1048		
2 bars @ 100 days		
Salt spray test:	Nil @ 250 microns	
BS1881/124 : 1988	thickness	
Over 1000 hr		
Bond strength	> 2 MPa	
BS1881, Part 207		
Impact resistance	Passed	
BS3900, Part E3		
Service temperature:	-20 - 75°C	
VOC	< 10 g/ltr	

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Method of Use Substrate Preparation Concrete surfaces

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The substrate should be sound, clean and free from contamination. Surface laitance should be removed by grit blasting or water jetting. All exposed blow holes should be filled with epoxy paste using YASH EPO COAT 842.

Steel surfaces

All surfaces should be grit blasted to reach a bright finish.

Mixing

To ensure proper mixing, a mechanically powered mixer or drill filled with suitable paddle should be used. Stir the content of each component separately to disperse any settlement. Mix both hardener and base together for 3 minutes in a separate container and until uniform colour and consistency is achieved.

Application

YASH EPO COAT 504 can be applied by brush and roller. The first coat should be applied to obtain a continuous uniform coating.

The second coat should be applied within the over coating time to achieve the maximum adhesion between the two coats.

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Notes:

For hot climate application, the following guidelines must be adopted as a prudent working regime:

The unmixed materials should be stored in a cool (preferably temperature controlled) environment, avoiding exposure to direct sunlight.

The mixing and placing equipment should be kept cool; shade protection should be arranged if necessary. It is especially important to keep cool, the equipment surfaces which will come into direct contact with the material itself.

Application in the middle of the day should be avoided and must not be carried out under direct sunlight.

For hand application, it should be ensured that sufficient operatives are available to complete the application within the pot life of the material.

If application is carried out in cold weather (below 15°C), the materials should be stored in a heated building and only removed immediately before use.

Accelerated heating methods must not to be used under any circumstances.

Cleaning

All tools should be cleaned immediately after application using DPC-solvent. Hardened materials must be cleaned mechanically.

Packaging

YASH EPO COAT 504 is available in 5 kg packs (3.8 litre).

Coverage

5 kg pack will cover 15 - 16 m^2 /coat to give dry film thickness of 250 microns.

Storage

YASH EPO COAT 504 has a shelf life of 12 months from date of manufacture if stored at temperatures between 5° C and 35° C.

If these conditions are exceeded, YASH Technical Department should be contacted for advise.

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Chemical Resistance (ASTM D543) Acids (m/v)

Hydrochloric Acid 10%	Resistant	
Nitric Acid 10%	Resistant	
Phosphoric Acid 10%	Resistant	
Sulphuric Acid 10%	Resistant	
Alkalis (m/v)		
Ammonia 15%	Resistant	
Sodium Hydroxide 25%	Resistant*	
Solvents and		
organics		
Oils, vegetables &	Resistant	
minerals	Resistant	
Ferric Chloride 15%	Resistant	
Kerosene	Resistant	
White spirit	Resistant	
Xylene	Resistant	
Acetone	Resistant	
Aqueous solutions		
Water	Resistant	
Sea water	Resistant	
Raw sewage	Resistant	
Sodium chloride sat.	Resistant	
Chlorinated water	Resistant	
Fuels		
Brake fluid	Resistant	
Diesel	Resistant	
Kerosene	Resistant	
UV resistance	Resistant*	

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All tools should be cleaned immediately after application using YASH - solvent. Hardened materials must be cleaned mechanically.

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Note: Slight discoloration in some cases may occur without

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affecting the performance of the coat.

Cautions Health and Safety

YASH EPO COAT 504 should not come in contact with skin or eyes. Goggles and gloves should be used.

In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advise if necessary.

During application in closed space, sufficient ventilation must be provided. In badly lit rooms only electric safety lamps are permitted.

Unused YASH EPO COAT 504 can contaminate water. Disposal according to local regulations must be followed.

Spillages

Spillages should be absorbed by sand then to be transferred to suitable containers. Disposal of these spillages and the empty packages must be done according to local regulations.

Fire

YASH EPO COAT 504 is non flammable.

More from YASH CONCHEM Products

A wide range of construction chemical products are manufactured by YASH which include:

- Concrete admixtures.
- Surface treatments
- Grouts and anchors.
- Concrete repair.
- Flooring systems.
- Protective coatings.
- Sealants.
- Waterproofing.
- Adhesives.
- Tile adhesives and grouts.
- Building products.
- Structural strengthening.

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Note : We endeavor to ensure that any advice, recommendation or information we may give in product literature is accurate and correct. However, due to the fact that we have no direct or continous control over where or how the products are applied, Yash cannot accept any libility either directly or indirectly arising from the use of Yash products, whether or not in accordance with any advice, specification, recommendation or information given by us.