Armaline® Coatings

Chemical resistant epoxy barrier coatings

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Armaline® Range

Armaline® epoxy coatings feature a chemical resistant epoxy resin base with "Barrier Technology" to protect concrete and steel surfaces from aggressive chemicals. This can result in a coating life in the range of 10 to 20 years, even in immersion service. A key feature and one of the reasons Armaline® epoxy coatings are selected for a job is that they have a high degree of moisture tolerance. This enables damp concrete to be coated, and work to continue during high humidity weather. Even rin events and water spills during a contract can be tolerated with minimal disruption.

• Armaline® 1720 & 1730 .... 1mm

Armaline® 1720 has excellent all round chemical resistance to a wide range of chemicals. Armaline® 1730 handles CIP chemicals used in the food industry and resists spillages of 98% sulphuric acid. Good moisture tolerance and will cure underwater. These flake filled epoxy coatings are applied to concrete and steel in one or two coats by brush or spray to a thickness of up to 1 mm. Used in immersion and non-immersion duties.

• Armaline® 3730 .... 3mm

Armaline® 3730 has excellent all round chemical resistance to a wide range of chemicals. It handles CIP chemicals used in the food industry and resists spillages of 98% sulphuric acid. It has good moisture tolerance and will continue to cure even if submerged after application. Armaline® 3730 epoxy coatings is trowel applied to concrete and steel to a nominal thickness of 3 mm. A layer of glass fibre reinforcing is included for high physical strength. Ideal for use in immersion and non-immersion duties. The finished surface is non-slip, abrasion resistant and physically robust. The moisture tolerance capabilities make it very useful for work in tight shutdown schedules and below grade work.

• Armaline® 5730 .... 5mm

Armaline® 5730 has excellent all round chemical resistance to a wide range of chemicals, handles CIP chemicals used in the food industry, and resists spillages of 98% sulphuric acid. It has good moisture tolerance and will continue to cure even if submerged after application. These filled epoxy coatings are trowel applied to concrete and steel to a thickness of 5 mm plus. Used in immersion and non-immersion duties. The finished surface is non-slip, abrasion resistant and physically robust. Ideal as a concrete repair material where concrete is in poor condition. Use Armagrout for situations wwith concrete rehabilitation when pouring into formwork is required.

• Armaline® Gripcoat

Non-slip safety floor coating that is a two component, modified epoxy coating applied by brush or roller, and with grit broadcast over immediately after the coating is applied. Gripcoat is specially formulated so it can be applied to wet and dry concrete floors to provide a non-slip coating for safety purposes. Grit is available from ARMATEC or you can supply your own to suit.

• Armaline® Chestline

Heavy duty epoxy tank lining reinforced with a glass fabric and applied to a nominal 2.5 mm thickness. The finished surface is smooth for ease of cleaning and minimum product hang up. Developed especially for lining stock chests in pulp and paper plants. The rapid application and moisture tolerance minimises shut down times.

• Armaline® EP7 Primer

Moisture tolerant epoxy primer with outstanding ability to bond to damp and wet substrates. Can be used with the Armaline® range of epoxy coatings for improved adhesion or to hold a prepared substrate ready for coating. It can also be used as a primer for other epoxy coatings.

Armaline® coatings are used to protect concrete surfaces from hydrogen sulphide attack in wastewater applications such as pump stations and inlet works.

CHEMICAL RESISTANT
All Armaline® epoxy coatings give excellent resistance to water, 70% sulphuric acid, 50% sodium hydroxide, 10% sodium hypochlorite and dilute nitric acid. The most outstanding chemical resistance is given by Armaline® 1730, 3730 and 5730 which can resist spills of concentrated sulphuric acid. Armaline® epoxy coatings are ideal for use in situations where there is a range of chemicals encountered.

TEMPERATURE RESISTANT
All Armaline® epoxy coatings give excellent resistance to elevated temperatures. In particular Armaline® 1730, 3730 and 5730 have the highest temperature resistance, and are often used when liquid temperatures are approaching 100ºC.

BARRIER TECHNOLOGY
Armaline® epoxy coatings provide resistance to the passage of moisture and chemicals with "Barrier Technology". An armour like barrier of fillers and flakes greatly increases the permeation resistance of the coatings, and hence its service life.

MOISTURE TOLERANT
Armaline® epoxy coatings have a good moisture tolerance and will bond to damp concrete and steel substrates. These coatings will continue to cure even if submerged after application. These features make the coatings easy to apply in in-situ applications where it is not always possible to have the substrates 100% dry, and is ideal for maintenance and shut-down situations with tight timetables.

COMPATIBLE WITH ARMAGROUT
All Armaline® epoxy coatings are compatible with ARMATEC's ArmaGrout epoxy foundation grout. Steel machinery bases to be grouted can be pre-coated with Armaline® epoxy coatings and the concrete foundation and surrounds can be coated with Armaline® epoxy coatings after the ArmaGrout has been placed.

SPECIAL FORMULATIONS
Enquiries for coatings in unique or difficult applications are welcomed. ARMATEC can develop and test special formulations in a very short time based on our extensive experience with handling very corrosive chemicals in industrial applications.

AVAILABILITY
Armaline® epoxy coatings are available in New Zealand on short lead times as all materials are held in stock in our New Plymouth factory.

MORE INFORMATION
For more information on a specific Armaline® epoxy coating system, please contact ARMATEC and ask for detailed bulletins. We will be pleased to offer our advice on the selection of the coating best suited to your application.

Armaline® Gripcoat on walkway through wet area in Pulp and Paper Plant for personnel safety reasons.

Armaline® Chestline under paper machine applied in tight shutdown period; concrete was not able to be 100% dried.

Armaline® 3730 applied to concrete structures and channels in wastewater treatment plant inlet works at Napier milliscreen plant. It has outstanding resistance to hydrogen sulphide gas. The Armaline® 3730 was applied during a tight shutdown period during which water intrusions could not be totally eliminated.