Product data

Verna Epoxy pool 355SY

Description:

Verna Epoxy pool 355SY is tow-component thixotropic, solvent free epoxy resin coating, abrasion and chemical resistance designed to maximize pot-life and adhesion without the use of solvents or diluents. It is supplied as colored base and hardener in pre-weighted quantities ready for onsite mixing and use.

Recommended use:

- Swimming pools
- Water tanks
- Concrete protection
- Protection of steel and other metallic surfaces.

Advantages:

- Solvent free
- Long pot-Life
- Excellent adhesion
- Excellent resistance to chemicals
- Excellent mechanical properties, high tensile and tear strength, abrasion resistance.
- Inhibits fungal and bacterial growth

PHYSICAL CONSTANTS:

Shade nos/Colors:	Blue
Finish:	glossy
Volume solids, %:	100
Theoretical spreading rate:	3 m^2/kg @200 micron/12 mils
Flash point:	100 °C [212 °F]
Specific gravity:	1.43 kg/litter
Fully cured:	7 days @ 25°C / 5 days @ 30°C
VOC content:	≤ 20 g/ltr ASTM D2369
Shore D Hardness: ASTM D2240	80 ± 5
Compressive strength: BS 6319-2	≥ 70 MPa @ 7 days
Flexural strength: EN 13892-2	≥ 40 MPa @ 7 days
Tensile strength: BS 6319-7	≥ 14 MPa @ 7 days
Bond strength on C25/30 concrete: ASTM D4541 EN 1542	≥ 2.0 MPa @ 7 days (concrete failure)
Impact resistance: EN ISO 6272	≥ 9.8 N.m
Water absorption: ASTM D570	< 0.25%
Taber abrasion resistance: (1000 g, 1000 cycle) ASTM D4060, weight Loss CS17 wheel	≤ 60 milligrams

Safety:

Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult VERNA Safety Data Sheets and follow all local or national safety regulations.

Product data

Verna Epoxy pool 355SY

APPLICATION DETAILS:

Version, mixed product:	355SY BASE 355S9: CURING AGENT 955SY
Mixing ratio:	100: 23 by weight Stir CURING AGENT before adding it to the BASE.
Application method:	Roll / Brush
Thinner (max.vol.):	Do not dilute
Pot life:	60 - 80 min @ 25°C / 30 - 50 min @ 35°C
Cleaning of tools:	Verna tool cleaner 99610
Overcoat interval, min:	12 hr @ 25°C /6hr@35°C
Overcoat interval, max:	36 hr @ 25°C /18hr@35°C

SURFACE PREPARATION:

The substrate must be clean, dry, even, dense and free from oil, grease, dust and other contaminants. A clean surface will ensure maximum adhesion between the substrate and the coating.
Concrete must have a minimum compressive strength of 25 N/mm² and a maximum moisture content of 4%, for concrete 28 days old or more.
Unsound layers and contaminated concrete surfaces must be prepared using mechanical surface removing equipment. Acid etching can be used only in well ventilated areas. Areas deeply contaminated by oil or grease, such areas should be treated by hot compressed air

PRECEDING COAT:

Verna SF epoxy floor coat is designed to be used without a primer. However, for highly porous substrates, **Vernafloor Primer 051SY** is recommended.

MIXING:

To avoid inconsistent workability and pot life, make sure that the materials to be used are stored in shaded area and protected from extremes of temperatures, for at least 24 hours prior to application.
Prior to mixing, stir well the individual components of the coloured base and hardener to eliminate any deposits. Add the entire contents of the hardener container to the base container and mix thoroughly using a slow speed drill mixer (i.e. 300 - 500 rpm) fitted with helix type paddle for approximately 3 minutes until uniform colour is achieved. Take care to ensure that the bottom and sides of the hardener part are thoroughly scraped.
Partial mixing is not allowed.

COATING APPLICATIONS:

Start paint application when a relative humidity of maximum 85%.
Use brush or lamb wool roller to apply the mixed Verna epoxy pool 355SY onto the prepared surfaces.
A minimum film thickness of 200 microns must be applied per one coat of Verna epoxy pool 355SY at 3 m²/kg per coat. second should be applied at a right angle to the first coat when the first coat has initially dried

Film thicknesses:

A minimum thickness of 200 microns per coat should be applied to obtain a smooth finish.

Possible Problems after Application:

- The pool is filled too soon before the paint is completely cured, causing a blush over the surface which looks like fading or chalking.
- Super-chlorinated water may cause a bleached-outlook.
- Shock of calcium hypochlorite can cause a white, bleached look to the paint film, leaving a whitish deposit
- Iron in the water from rust in the filter system may leave deposits and stain the film.
- All epoxies will chalk to some degree due to exposure to UV rays of the sun.

Product data

VERNA
The Paint Masters

Verna Epoxy pool 355SY

Spillage Chemical Resistance after full cure (7 days @ 25C°), ASTM D1308 (Spot - test @ 1 hr)			
Organic Acids		**Inorganic Bases**	
Lactic Acid 10%	R	Sodium Hydroxide 50%	R R
Lactic Acid 10%	R	Ammonia Solution 10%	R
Lactic Acid 10%	RS + SS	Potassium Hydroxide 50%	R R
Lactic Acid 10%	RS + SS	**Aquous Solutions**	
Lactic Acid 10%	R	Sodium Chloride sat	R
Lactic Acid 10%	RS	Hydrogen Peroxide 2%	R
Solvents		Tap Water	R
White Spirit	R	Chlorinated Water	R
Xylene	R	Dead Sea Water	R
Toluene	R	**Oils & Fuels**	
Acetone	R	Benzyl Alcohol	SS
Ethanol	R	Brake Fluid	R
Ethyl acetate	R	Engine Oil	R
N propanol	R	Diesel	R
Methoxy propanol	R	Kerosene	R
Inorganic Acids		Detergents & Soaps	R
Sulphuric Acid 25%	RS + SS	*R: Resistant*	
Sulphuric Acid 40%	RS + SS	*RS: Resistant with slight discoloration*	
Phosphoric Acid 20%	RS + SS	*SS: Slight softening*	
Hydrochloric Acid 10%	RS + SS		
Hydrochloric Acid 32%	RS + SS		
Nitric Acid 10%	R		
The spillage area should be cleaned as soon as possible by fresh water			

This Product Data Sheet supersedes those previously issued.
For explanations, definitions and scope, see "Explanatory Notes" available . Data, specifications, directions and recommendations given in this data sheet represent only test results or experience obtained under controlled or specially defined circumstances. Their accuracy, completeness or appropriateness under the actual conditions of any intended use of the Products herein must be determined exclusively by the Buyer and/or User.
The Products are supplied and all technical assistance is given subject to VERNA GENERAL CONDITIONS OF SALES, DELIVERY AND SERVICE, unless otherwise expressly agreed in writing. The Manufacturer and Seller disclaim, and Buyer and/or User waive all claims involving, any liability, including but not limited to negligence, except as expressed in said GENERAL CONDITIONS for all results, injury or direct or consequential losses or damages arising from the use of the Products as recommended above, on the overleaf or otherwise. Product data are subject to change without notice and become void five years from the date of issue.