

YaYa.tec[®] FoodCoating V2.00

Epoxy-based Coating strengthened by a ceramic Filler, with European Certificate for direct Food Contact for interior Use

Field of Application

YaYa.tec[®] FoodCoating V2.00 is designed to be used in:

- Silos for Sugar and other Foodstuffs (Certificate of Conformity according to Commission Regulation (EU) 10/2011, Regulation (EC) 1935/2004 and Regulation (EC) 1282/2011)
- Storage tanks for crude oil, hydrocarbons, chemicals, sewage plants (Cert. ARAMCO APCS-2i + 28 + 117)
- Pressure or processing tanks - biogas fermenters
- Pipelines for gas and oil
- Any type of offshore platforms, buoys (surface lifetime slightly reduced by the chalking of the epoxy)
- Cargo and naval vessels, ferries and fibre-reinforced yachts (osmosis protection) and tanks/containers thereof
- Pools (intermediate waterproofing below the UV-protecting top coat), Turkish baths, Whirlpools
- Fair-faced concrete elements (mechanical and chemical protection, waterproofing) - also available as putty
- Steel, aluminium or fibre elements

German Technology

Properties

YaYa.tec[®] FoodCoating V2.00 is a specially formulated 2-component epoxy Novolac-resin, strengthened by a Ceramic Filler, thus conferring exceptional properties to the product combined with highest durability:

- density of the mixed product: approx. 1,64
- solid state body 100 % - solvent-free - VOC content = 0 g
- appropriate for the direct contact with foodstuff - request certificates of conformity
- standard colour light grey, other colours RAL upon request - satin finish
- excellent adhesion: up to 3,9 N/mm² on concrete, >27 N/mm² (ISO 4624) on steel
- very high abrasion resistance: 80 mg of loss (test: ASTM D 4060)
- completely waterproof and water vapour impermeable (at 500 microns thickness)
- resistant to wastewater, different diluted leaches and acids, brines, mineral oils, fats, fuels and many solvents - pls. consult the table of chemical resistances
- highly resistant to seawater: > 6.000 h of immersion passed (test: ISO 20340)
- corrosion protection: > 10.000 h salt spray test (ISO 7253) - C5-M + Im1 + Im2 + Im3 (all long ISO 12944-2)
- wet temperature range: -50 ... + 130 °C - dry temperature range: -50 ... + 150 °C

Quality assurance and inspection

YaYa.tec[®] FoodCoating V2.00

is produced according to the Regulation (EU) 2023/2006 - GMP Good Manufacturing Practice
The manufacturer has a quality assurance and inspection plan available for clients.
Recommendations for qualified test control units are also available.

Disclaimer

Any information about YaYa.tec[®] FoodCoating V2.00 in this Technical Data Sheet (TDS) must be understood as a material description, based upon laboratory test results and practical experience under normal conditions, which CANNOT be applied to specific applications beyond our influence and control. In particular, the recommendations regarding the application and use require the proper storage and treatment of our products. Due to differences in materials, substrates and real site conditions YaYa Materiales SLU does not assume any warranty or liability for application results or fitness for a particular purpose, of any legal relationship whatsoever, neither from this information, nor from any given recommendations, or from any other oral advice. The user of the product must check the product's suitability for the intended application and purpose. YaYa Materiales SLU reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. The most recent issue of the Product Data Sheet has to be considered, please ask always for the current version.

Ya[®]
Ya

Intelligent & Advanced
Construction Material
Marine & Industrial Paints
Historic Building Repair
& Injection - Grouting

Qualified Assessment &
Consulting @ German Level

Concrete
Technologist VDB
German E-Schein
Expert Planner &
Supervisor / Certifier
Concrete Repair &
Maintenance EN 1504
German SKP (DAFStb) & SIVV

YaYa Materiales, SLU VAT ESB38656617 ES-38750 El Paso, Cno. de La Era, 16
Tlf.: (+34) 922.485.450 - Fax: 922.486.206 - eMail: info@yaya.es San Miguel de La Palma (TF) - Canary Islands

YaYa.tec® FoodCoating V2.00

Epoxy-based Coating strengthened by a ceramic Filler, with European Certificate for direct Food Contact for interior Use

Substrates

YaYa.tec® FoodCoating V2.00 can be applied to a variety of substrates:

- metals
- concrete (to be primed with **YaYa.tec® SynthoFloor 8010**)
- plastics (except those which cannot be painted: PE, PP, Teflon etc.)
- fibre reinforced polyester (GFK - GFRP)
- carbon-epoxy (CFK - CFRP)

Surface Preparation

YaYa.tec® FoodCoating V2.00 can be applied to surfaces prepared as follows:

All surfaces to be coated should be clean, dry and free from contamination. Prior to application, all surfaces should be assessed and treated in accordance with ISO 8504:2000. Remove weld spatter and smooth weld seams and sharp edges. Oil or grease should be removed according to SSPC-SP1 solvent cleaning.

Steel substrates - galvanized steel see below

For best adhesion results, the surfaces must be prepared by abrasive blast cleaning to minimum Sa 2 1/2 (ISO 8501-1:2007) or SSPC-SP10. A sharp, angular surface profile of 75...100 µm is required. Contact YaYa Materiales SLU for further information.

The coating system must be applied before oxidation of the steel occurs. If oxidation does occur, that means within a few hours at standard humidity or few minutes at a maritime climate, the entire oxidized area should be blasted again to the standard specified above. Surface defects revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.

Concrete substrates

Concrete substrates must be prepared according to the recommendations of the DAfStb (German Committee for Reinforced Concrete) Guideline SIB (SIB-Rili - Protection and Repair of Concrete Members) respectively the regulations of the ZTV-ING; this means the elimination of any layer or film that might impede the adhesion of the coating, especially cement slurries, with the result that the granulation of the aggregates becomes visible; furthermore, the concrete must be sufficiently absorbent in order to receive the primer. This surface quality is to be achieved by wet sandblasting or any other method enumerated by the SIB-Rili of the DAfStb, for example diamond grinding. The concrete must have a tensile strength of at least 1.5 N/mm² after the preparation.

After cleaning the prepared concrete from any grinding or other dust and impurities, the now open porous concrete will be primed with the special epoxy primer **YaYa.tec® SynthoFloor 8010** (max. concrete humidity 6 %, measured by the CW method), consumption 300...600 g/m². During the over coating interval that must be strictly observed and is strongly dependent of the ambient temperature, the first and eventually second hand of the **YaYa.tec® FoodCoating V2.00** coating is applied.

If it is foreseeable that the over coating interval between any subsequent layers cannot be met, then the previous layer must be sanded with oven-dried siliceous sand 0,4...0,8 mm whilst still wet and the surplus sand be removed after drying. In this case two hands of primer are recommendable. If the over coating interval will be involuntarily surpassed, then this previous dry layer has to be grinded completely with grain 80 until rough and matted.

In the case of hand application with brush or roller, it is strongly recommended to sand between all the layers and to apply 2 hands of the primer.

Plastics - Fibre - Composites substrates + galvanized steel substrate

Clean with an aqueous ammoniacal solution (5 %) plus a wetting agent (just a drop per litre), rubbing the surface with green fibre cloth until a very fine foam appears (which is light grey in case of galvanized steel), then rinse with clear water and let dry - for more information please contact YaYa Materiales SLU.

YaYa®
YaYa

**Intelligent & Advanced
Construction Material
Marine & Industrial Paints
Historic Building Repair
& Injection - Grouting**

Qualified Assessment &
Consulting @ German Level

**Concrete
Technologist VDB
German E-Schein
Expert Planner &
Supervisor / Certifier
Concrete Repair &
Maintenance EN 1504
German SKP (DAfStb) & STIV**

YaYa Materiales, SLU VAT ESB38656617 ES-38750 El Paso, Cno. de La Era, 16
Tlf.: (+34) 922.485.450 - Fax: 922.486.206 - eMail: info@yaya.es San Miguel de La Palma (TF) - Canary Islands

YaYa.tec® FoodCoating V2.00

Epoxy-based Coating strengthened by a ceramic Filler, with European Certificate for direct Food Contact for interior Use

Application

YaYa.tec® FoodCoating V2.00 is packed in 15 kg (component A) + 1,5 kg (component B) = 16,5 kg kits.

General application data:

- **YaYa.tec® FoodCoating V2.00** ONLY shall be applied by properly qualified professional applicators in industrial conditions, no domestic or simple workshop conditions - read carefully the Safety Data MSDS !!!
- Max. humidity of the concrete: 4 % (if primed 6 %); protected against rising damp or backside humidity
- Air and substrate application temperature: +10 ... 30 °C (min. 3 °C above dew point)
- Material spray application temperature: mixed material min. 20 °C
- Relative air humidity during the application: max. 85 % (to be measured in the vicinity of the substrate)

Mixing process:

1. Premix component A (15 kg) alone for 4 minutes with a mixer for resin at about 300 rpm
2. Then mix both components A+B with the same mixer at same speed for 2 minutes
3. Solvents: not allowed, especially not water
4. The ready mixed product will be applied by spraygun (preferred), brush or roller
5. Thickness per hand: 400 ... 650 µm (spraygun) - wet (WFT) = dry (DFT) (volume solids 100 %)
6. Application time (pot life): approx. 35 min (20 °C) - approx. 25 min. (30 °C)

Specifications of the Airless Spray Pump + Application techniques:

- Airless spray pump with ratio 1:70 or more (e.g. GRACO Xtreme 70:1)
- Tip size 0,48 ... 0,65 mm / 100 ... 150 bar
- Remove any filter !!!
- Max. hose length: 20 m
- Spray hose diameter: max. 3/4"
- Material must be taken up directly (without intake hose)

**Very important:
Never leave material in the hose under pressure = significant reduction of pot life !!!**

Theoretical consumption:

1 hand x 500 µm = 0,82 kg/m² = 1,22 m²/kg - the data of this TDS have been obtained at 500 µm/m²

1 hand x 650 µm = 1,07 kg/m² = 0,93 m²/kg

2 hands x 500 µm = 1000 µm = 1,64 kg/m² = 0,61 m²/kg

Drying times:

- Rainproofness: 8 h (20 °C - max. 85 % rel. hum.)
- Overcoating interval 10 ... 96 h - min. 10 h: spraygun - 15 ... 18 h: brush / roller (20 °C - max. 85 % rel. hum.)
- Fully cured: 48 h (20 °C - max. 85 % rel. hum.)
- Chemically resistant: 7 days (20 °C - max. 85 % rel. hum.)

Storage and Safety Advices

Storage 12 months in a dry, cool and well-ventilated place (0-35 °C); containers hermetically sealed.

Classification component A: UN 3082 - Cl. 9 - PG III / Classification component B: UN 2735 - Cl. 8 - PG II

Comp. A: WARNING ! Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects. Contains epoxy constituents. May produce an allergic reaction.

Comp. B: DANGER ! Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects.

Comp. A + B: Avoid breathing dust/fume/gas/mist/vapours/spray. If exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Wear protective gloves/protective clothing/eye protection/face protection. Take off contaminated clothing and wash it before reuse. Avoid release to the environment. Do not eat, drink or smoke when using this product.

Refer always to the Material Safety Data Sheets MSDS.

YaYa

**Intelligent & Advanced
Construction Material
Marine & Industrial Paints
Historic Building Repair
& Injection - Grouting**

Qualified Assessment &
Consulting @ German Level

**Concrete
Technologist VDB
German E-Schein
Expert Planner &
Supervisor / Certifier
Concrete Repair &
Maintenance EN 1504
German SKP (DAFStb) & STIV**

YaYa Materiales, SLU VAT ESB38656617 ES-38750 El Paso, Cno. de La Era, 16
Tif.: (+34) 922.485.450 - Fax: 922.486.206 - eMail: info@yaya.es San Miguel de La Palma (TF) - Canary Islands



comp. A:



comp. B:

