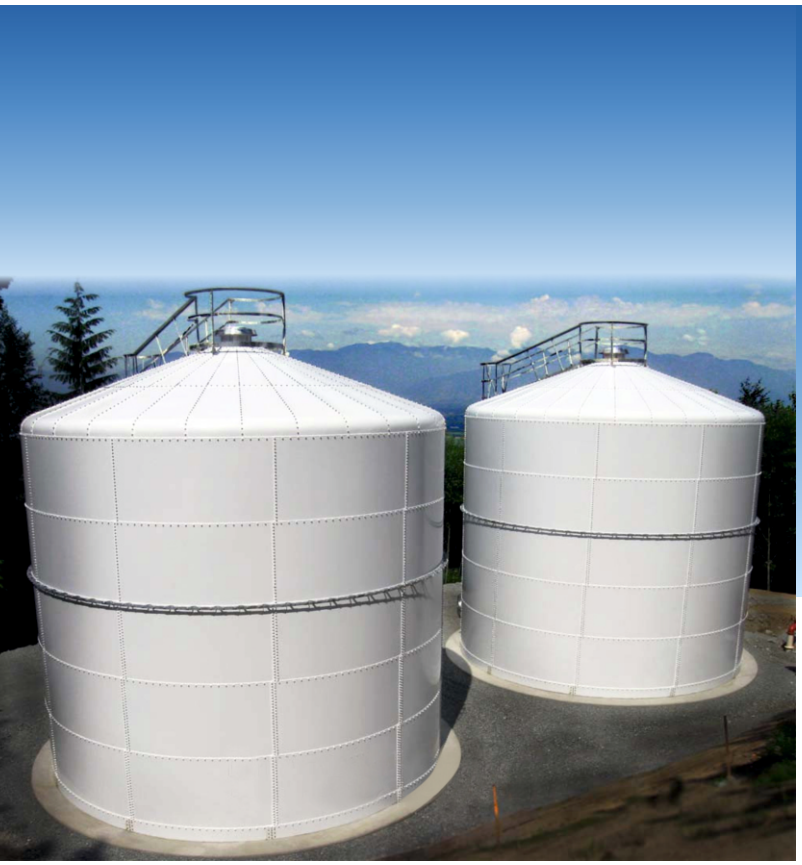
LONG-TERM PROTECTION AGAINST CORROSION AND AGGRESSIVE ENVIRONMENT



PASSATSTAL

passatstal.by

TABLE OF CONTENTS

ABOUT COMPANY

WINNING CORROSION

PASSATSTAL, LLC is an expert in the issue of corrosion and abrasion protection of process tanks, steel structures, technological pipelines, building structures. We produce a wide range of industrial coatings for different environments and working conditions. In addition, we cooperate with the largest European manufacturers of protective coatings Corrocoat Ltd. and Alma-Color Sp. z o.o. We use long-term experience shared with our partners to solve optimally a problem of our customers and offer them the most durable materials taking into account the set operating conditions.

MATERIALS OF OWN PRODUCTION

Anti-corrosion and abrasion resistant industrial coatings Farbacoat-KNOW-HOW. These coatings are created in the most technologically advanced market with specifically demanding consumers. The whole range of coatings Farbacoat is developed in European laboratories. These are materials of high chemical resistance. In terms of performance, Farbacoat industrial coatings are comparable to the coatings of the world's leading manufacturers, and in a number of features even exceed them. Moreover, anti-corrosion and abrasion resistant coatings Farbacoat are more accessible than foreign counterparts.

LINED TECHNOLOGICAL PIPELINE

PASSATSTAL, LLC manufactures pipe and fittings lined with the corrosion and abrasion-resistant coatings Corrocoat Polyglass (UK). They are suitable for a large number of different chemical media with pH from 0 to 13, are not exposed to demineralized water at temperatures up to 90°C, resist most solvents, are used inaggressive atmospheric conditions and splash zones (watering). Such pipelines are one of the most reliable in the world and at the same time, they are two times cheaper than rubber pipes similar in terms of durability and one and a half times more accessible than stone-casting pipes.

PROTECT AND RESTORE CAPACITIVE EQUIPMENT AND PIPELINES

PASSATSTAL, LLC provides durable corrosion protection of external and internal surfaces of the tank equipment from external influences and contained corrosive liquids. The material of the protective coating is selected in accordance with the conditions, and operating modes of technological equipment.
Our company also carries out works on restoration of the worn-out, corroded capacitive equipment, and works on renovation of pipelines.

STRICTLY OBSERVE THE RULES

PASSATSTAL, LLC has a compliance certificate for the construction of first to fourth class of complexity in terms of protection of building structures and equipment. The company has a quality management system ISO 9001-2015. On the proposed industrial coatings the following technical certificates have been obtained.





PROTECTIVE COATINGS

THE MOST EFFECTIVE MEANS OF EXTENSION OF THE SERVICE LIFE OF THE EQUIPMENT, METAL STRUCTURES AND CONSTRUCTION MATERIALS

Corrosion annually brings down one-fifth of all industrial equipment in the world. As economic studies conducted in industrialized countries have shown, total economic losses from corrosion amount to 5% of the total national product and are close to the development costs of the most important industries. Research results also showed that the problem of protecting metals from corrosion at the present stage is largely an organizational problem: it is possible to achieve a significant (up to 40%) reduction of damage from corrosion due to the proper organization of anti-corrosion protection and choice of anti-corrosion material.

Abrasive, chemically aggressive environments in which the production process takes place cause corrosion and considerable deterioration of metal structures, elements of equipment, construction metal and reinforced concrete structures of buildings and structures. Apart from this, atmospheric factors (precipitation, temperature changes) have a significant effect. That is, no matter how chemically neutral the production may be, it is impossible to avoid corrosion without prior protection. Therefore, a thinking leader, both in the construction of new facilities and in the repair of existing ones, pays special attention to the anti-corrosion protection of their tangible assets.

Protection with anti-corrosion coatings extends the service life of equipment and metal structures, and, as a result, cuts down costs by reducing the number of repairs and production line downtime.


farbacoat
«ФАРБАКОУТ УРЕТАН 30»
ЦВЕТ: RAL 3009


farbacoat
«ФАРБАКОУТ УРЕТАН 35»
ЦВЕТ: RAL 3009


farbacoat
«ФАРБАКОУТ ВИНИЛЭСТЕР 81»
ЦВЕТ: СВЕТЛО-ЗЕЛЕНЫЙ


farbacoat
«ФАРБАКОУТ ЭП-045»
ЦВЕТ: КОРИЧНЕВО-БЕЖЕВЫЙ


farbacoat
«ФАРБАКОУТ ЭП-152»
ЦВЕТ: RAL


farbacoat
«ФАРБАКОУТ ПРОТЕКТ»


farbacoat
«ФАРБАКОУТ ТЕРМОФУР»


farbacoat
«ФАРБАКОУТ СИНЕРДЖИ 10»
ЦВЕТ: КРАСНЫЙ ОКСИДНЫЙ


farbacoat
«ФАРБАКОУТ ПРОФИ 63»
ЦВЕТ: RAL


farbacoat
«ФАРБАКОУТ ЭПОКСИ 20»
ЦВЕТ: RAL 3009


farbacoat
«ФАРБАКОУТ ПОЛИЭСТЕР 47»
ЦВЕТ: СЕРЫЙ

COATINGS SERIES

FARBACOAT EPOXY 20

Anticorrosive two-component thick-layer epoxy coating with a high content of dry residue.
It has high corrosion resistance, excellent abrasion resistance, and high insulating properties.
The coating is resistant to atmospheric factors, splashes of moderately aggressive chemicals. The shade of the coating may slightly change under the influence of solar irradiation.
The coating cures at low temperatures.

ADVANTAGES

- very high adhesion to steel surfaces;
- high mechanical stability;
- it cures quickly even at low temperatures;
- the coating is resistant to weathering.

RECOMMENDATIONS FOR USE

- the coating is used as an anti-corrosion, primer and finishing layer in paintwork systems where a low content of volatile organic substances is required, as well as large coating
- thickness;
use coatings for priming steel structures that operate in marine, industrial and urban environments.

SPECIFICATIONS

Density of the mixed product (approx.) kg/dm^3	1,47
Recommended thickness of the dry/wet layer, μm	120/150
Drying time (20°C): up to degree 3, h	4
Suitability of the mixture for use at 20°C, h	4
Time of complete drying of the coating at 20°C, h (DLT = 120 μm)	10
Theoretical consumption for a dry coating 120 μm thick, l/m^2	0,15
Dry residue (± 2), % vol.	80
VOC content in a ready-to-use product, g/l	250
Recommended number of layers	1-2

MIX PREPARATION

FARBACOAT EPOXY 20 comes in two containers. To prepare the coating, mix the full amount of the two containers in the specified proportions.
Coating preparation: add component II to component I (before mixing, the components of the coating should be thoroughly mixed).

Mix in the following ratio:	Volume:	Weight:
- Component I	4	10
- Component II	1	1,5

COATING TYPE
semimatte

COLORS
gray, red oxide. Coating color is possible in RAL colors.

WARRANTY SHELF LIFE
when stored in closed factory packaging at temperatures up to 40°C - 12 months from the date of manufacture.

IMPORTANT!
The product is designed for professional industrial use. Information about the safety use of the product is found in the Safety Data Sheet for the FARBACOAT EPOXY 20 Coating.

Stir the resulting mass thoroughly until a homogeneous mass by manual or mechanical means. It is not recommended to mix the mixture intensively, as air may get into the mixture. After 10 minutes (at a temp. of 20°C) the mixture is ready for use.
If painting is carried out at low temperatures (5°C and below), after stirring the mixture, the exposure time is increased to 20 minutes. It is recommended to use Diluent 20 to 10% of the volume depending on the method of application and the power of the equipment used.
The mixture is suitable for use within 4 hours at 20°C. High temperatures reduce service life, while lower temperatures prolong it. After mixing the components, the product must be used within the indicated period of service life.

APPLICATION

Surface. The cleaner the surface on which the mixture is applied, the more resistant the coating will be. Coatings applied directly to steel surfaces and sandblasted to a minimum degree of purification of Sa 2½ have the highest chemical and mechanical resistance.

- The surface of the steel must be dry, free from contamination, completely degreased.
- submersible surfaces should be cleaned to Sa 2½ degree or at least to St 2 degree for exterior surfaces.
- Before applying the coating to the concrete surface, it must be cleaned of fats, oils, liquid bituminous masses and detergents. If the concrete is new (min C20/25), be sure to remove the lime milk. Smooth concrete should be mechanically brought to a roughness, for example by easy bead-blasting treatment to get a CSP-3 profile (according to ICRI). In case of renovation, the concrete surface should have at least CSP1 profile, as well as adhesion at the level of> 1.5 MPa in the tear test.

METHOD OF APPLYING THE FINISHED COATING

- airless spraying:
  nozzle ⌀ – 0.38-0.53 mm
  pressure – 17-23 MPa
- brush
- roller
- pneumatic spraying:
  nozzle ⌀ – 0.22-0.25 mm
  in this case, it may be necessary to add Diluent 20 in a volume of up to 20%.

COATING FULL CURE TIME

- 20°C – 10 hours; 10°C – 14 hours;
- 0°C – 30 hours; -10°C – 3 days.

Overlap interval	30°C	20°C	10°C	0°C	-10°C
- Minimum (h)	3	6	10	20	35
- Maximum (month)	1 month**				

** In a period of high temperatures and with strong exposure of the painted surfaces to sunlight, the indicated time should be reduced to 1 week.

This time applies only to the recommended thickness of coatings that dry in conditions of good ventilation. The time of application of subsequent layers depends on the temperature, ventilation conditions, the number of layers and the thickness of the coating;

- In case of exceeding the maximum interval, remove dirt and limescale from the coating (can be treated with abrasive material, or rinsed with water under pressure with sand, this will make the surface rough).
- If the coating is used in aggressive conditions, it is recommended to prepare the surface in the best way, it is allowed to apply subsequent layers until the previous layer is completely cured.

SUBSEQUENT PAINTING

- of FARBACOAT - two-component epoxy, polyurethane, one-component acrylic.

COATING APPLICATION AND CURING CONDITIONS:

- minimum surface temperature: -10°C;
- surface temperature above the dew point at 3°C (avoid condensation);
- relative air humidity not higher than 85%;
- excellent ventilation.

PACKAGING

component I - metal bucket
- vol. 20 l, net weight - 25 kg
- component II - metal bucket vol. 4 l, net weight - 3.75 kg

Use with caution. Packages contain appropriate safety signs that must be observed.

COATINGS SERIES

FARBACOAT

URETHANE 30

Contains active anti-corrosion pigments and cured with aliphatic isocyanates.
Contains active anti-corrosion pigments. Forms semimatte high-quality coverings with a resistant color. The coating can be used as a straight-to-metal single-layer system and used in a moderately corrosive environment.

ADVANTAGES

- High resistance to adverse atmospheric conditions and mechanical abrasion;
- The coating is resistant to oil splashes, aggressive chemicals;
- Dries quickly;
- Good mechanical stability, perfect adhesion.
- Resistant to UV radiation;
- Coating directly on metal is allowed;
- Ensures flawless corrosion protection.

RECOMMENDATIONS FOR USE

Coatings are used as protection for aluminum, galvanized and steel surfaces that are subject to the influence of negative atmospheric factors, as well as aggressive chemical attack.

SPECIFICATIONS

Density (approx.) (± 0.1) kg/dm^3	1,3
Recommended thickness of the dry/wet layer, μm	60/95
Drying time (20 °C): to degree 1 (from dust), min	15
to degree 3 (dry to the touch), h	1
up to degree 6, h	2
Component availability for use at 20°C, h	8
Time of complete curing of the coating at 20 °C, days	7
Theoretical consumption for a dry coating 60 μm thick, l/m^2	0,095
Dry residue (± 2), % vol.	65
VOC content in a ready-to-use product, g/l	<420
Recommended number of layers	1 – 2

COATING TYPE
semimatte

COLORS
RAL color palette or according to customer samples.

WARRANTY SHELF LIFE
when stored in closed factory packaging at a temperature of 5-35°C - 12 months from the date of manufacture for component I (base) and 6 months for component II (curing agent).

IMPORTANT!
The product is designed for professional industrial use. Information about the safety use of the product is found in the Safety Data Sheet for the FARBACOAT URETHANE 30 Coating.

MIX PREPARATION

Coating FARBACOAT URETHANE 30 is supplied in two containers. To prepare the coating, mix the full amount of the two containers in the specified proportions.
Coating preparation: add component II to component I (before mixing, the components of the coating should be thoroughly mixed).

Mix in the following ratio:	Volume:	Weight:
- Component I	100	100
- Component II	10	8

Stir the resulting mass thoroughly until a homogeneous mass by manual or mechanical means.
It is not recommended to mix the mixture intensively, as air may get into the mixture.
After 15 minutes (at a temp. of 20 °C) the mixture is ready for use.
The amount of diluent DILUENT 30 (if necessary): up to 10% of volume.

Application method:

- airless spraying: nozzle diameter ø 0.38-0.48 mm; pressure 10 - 15 Mpa;
- brush;
- roller;
- air spraying: sprayer nozzle diameter ø 2.2-2.5 mm (after dilution to a viscosity of 50-60s using a VZ-246 viscometer, nozzle ø 4 mm).

APPLICATION

Surface.
The cleaner the surface on which the mixture is applied, the more resistant the coating will be. Coatings applied directly to steel surfaces that have been sandblasted to a minimum degree of purification Sa 2½ have the highest chemical and mechanical resistance.

- Steel surface: dry, free from dirt, degreased - it is cleaned at least to degree St 2 for exterior surfaces;
- Aluminum surface: dry, degreased, sanded.
- Galvanized surfaces require the removal of zinc corrosion products (white rust) and dirt. Cleaning with hot water, pressured water, steam or abrasive treatment.
- FARBACOAT EPOXY 20 coating - dry, free of dirt, grease and dust;
- the recommended thickness of the coating applied directly to the metal is 100 microns. Number of layers: 1-2.

COATING APPLICATION AND CURING CONDITIONS:
- air temperature; up to - 5 °C;
- surface temperature above 0 °C (without frost and ice);
- surface temperature above the dew point at 3 °C (avoid condensation);
- relative air humidity not higher than 80%;
- excellent ventilation.

PACKAGING
– component I - metal bucket vol. 20 l, net weight - 25 kg
– component II - metal bucket vol. 4 l, net weight - 2 kg

COATINGS SERIES

FARBACOAT

URETHANE 35

Acrylic polyurethane, two-component coating for general use. Forms a glossy, decorative color-resistant coating of high quality. It is recommended for use as a topcoat in polyurethane and epoxy systems for objects that are constantly exposed to aggressive atmospheric and chemical factors. The coating of the white color is able to reflect more than 70% of the sun's rays.

ADVANTAGES

- High resistance to adverse atmospheric conditions and mechanical abrasion;
- High durability of color and glossy shine;
- High mechanical stability;
- High decorative properties of the coating: it does not form a chalky deposit and does not turn yellow.
- The coating is resistant to oil splashes, aggressive chemicals;
- The coating is resistant to being in sea (tap) water, as well as oil products.

RECOMMENDATIONS FOR USE

It is recommended to use the coating as a coating paint in epoxy systems on those objects that are subject to constant aggressive effects of weathering and chemicals:
- chemical and petrochemical plants;
- pulp and paper mills;
- sugar factories, etc.

The coating is also used for final painting of construction and agricultural equipment, surface parts of swimming sports equipment, bridge and steel structures, ships, various hardware, railway, cargo and passenger transport;
It is recommended to apply everywhere on surfaces that require high resistance to mechanical, chemical and atmospheric factors.

SPECIFICATIONS

Density (approx.) (± 0.1) kg/dm^3	1,2
Recommended thickness of the dry/wet layer, μm	50 / 90
Drying time (20°C): to degree 1 (from dust), min	3
to degree 3 (dry to the touch), h	7
Suitability of the mixture for use at 20°C, h	4
Time of complete curing of the coating at 20 °C, days	7
Theoretical consumption for a dry coating 50 μm thick, l/m^2	0,09
Solvent content (± 2), % by weight	36

COATING GLOSS
high gloss

COLORS
RAL color palette or according to customer samples.

WARRANTY SHELF LIFE
when stored in closed factory packaging at a temperature of 5-35 °C - 12 months from the date of manufacture for component I (base) and 6 months for component II (curing agent).

IMPORTANT!
The product is designed for professional industrial use. Information about the safe use of the product is found in the Safety Data Sheet for the FARBACOAT URETHANE 35.

Dry residue (± 2), % vol.	58
VOC content in a ready-to-use product, g/l	450
Recommended number of layers	1-2

ENAMEL PREPARATION

Coating FARBACOAT URETHANE 35 is supplied in two containers. To prepare the coating, mix the full amount of the two containers in the specified proportions.
Coating preparation: add component II to component I (before mixing, the components of the coating should be thoroughly mixed).

Mix in the following ratio:	Volume:	Weight:
- Component I	4,5	5
- Component II	1	1

Stir the resulting mass thoroughly until a homogeneous mass by manual or mechanical means. It is not recommended to mix the mixture intensively, as air may get into the mixture.
After 15 minutes (at a temp. of 20 °C) the mixture is ready for use.
The amount of DILUENT 30 (if necessary) - up to 5% of volume.
The mixture is suitable for use within 4 hours at 20 °C. High temperatures reduce service life, while lower temperatures prolong it.
After mixing the components, the product must be used within the indicated period of service life.

Application method:

- airless spraying: nozzle diameter ø 0.33-0.43 mm; pressure 10 - 15 MPa;
- brush;
- roller;
- air spraying: nozzle diameter ø 1.7-2.0 mm (after dilution to a viscosity of 50-60s using a VZ-246 viscometer, nozzle ø 4 mm).

Coating full cure time

- 20°C – 7 days
- 15°C – 14 days

APPLICATION

Surface - epoxy coating Farbacoat Epoxy 20 - free from corrosion, cleaned of salt, grease, dust and dirt.

- overlap interval	20°C	10°C
- Minimum (h)	8	16
- Maximum (month)	2	4

This time applies only to the recommended thickness of coatings that dry in conditions of good ventilation. The time of application of subsequent layers depends on the temperature, ventilation conditions, the number of layers and the thickness of the coating.
The minimum temperature of the material ready for application is 15°C.

Use with caution.
Packages contain appropriate safety signs that must be observed.

COATING APPLICATION AND CURING CONDITIONS:

- air temperature; up to -5 °C;
- surface temperature above 0 °C (without frost and ice);
- surface temperature above the dew point at 3 °C (avoid condensation);
- relative air humidity not higher than 80%;
- excellent ventilation.

PACKAGING

– component I - metal bucket vol. 20 l, net weight - 20 kg
– component II - metal bucket vol. 4 l, net weight - 4 kg

COATINGS SERIES
FARBACOAT
VINYLESTER

Two-component thick-layer coatings with a high solids content, designed primarily for immersion conditions, if high protection against chemical attack is required. The coatings are used in environments with a pH from 0 to 13.
They are a composition based on epoxy-volatile vinylester resins and a number of special organic and inorganic fillers and additives.

Depending on the type and number of special fillers and additives of the «FARBACOAT VINYLESTER» series coatings, the following modifications are made:

- **«FARBACOAT VINYLESTER 51»** - primer, for priming and impregnating glass materials, applied by brush, roller, airless spraying;
- **«FARBACOAT VINYLESTER 52»** - for lining pipes by the centrifugal method;
- **«FARBACOAT VINYLESTER 53»** - lining, for application by brush or roller;
- **«FARBACOAT VINYLESTER 54»** - lining, increased thixotropy, for applying with a spatula;
- **«FARBACOAT VINYLESTER 55»** - repairing, for filling of shells, cracks, cavities and alignment (smoothing) of welds, for applying with a spatula.

ADVANTAGES

- very high adhesion to steel and concrete surfaces;
- high chemical resistance in the environment of concentrated solutions of acids, alkalis, salts;
- high temperature resistance in aggressive environment - up to 130 °C;
- high mechanical resistance, abrasion resistance.

RECOMMENDATIONS FOR USE

Used to protect internal surfaces of pipelines, metal tanks, tanks, process equipment, concrete tanks, general-purpose metal structures where high protection against chemical attack is required, as well as at high abrasive loads.

SPECIFICATIONS

Density (approx.), kg/dm³	1,22-1,85
Recommended thickness of the dry/wet layer, μm	300/340
Drying time (20 °C): up to degree 3, h	2
Suitability of the mixture for use at 20°C, h	0,5..1
Time of complete curing of the coating at 20 °C, days	2
at 15 °C, days	3
Theoretical consumption for a dry coating 1000 μm thick, lkg/m²	1,2
Dry residue (± 2), % weight	95-97
Number of layers	3-4

COATING TYPE
semimatte

COLORS
gray, light green.
Tinting in other colors is possible.

SHELF LIFE
when stored in closed factory packaging at a temperature of 5-35 °C - 6 months from the date of manufacture for component I (base) and 6 months for component II (curing agent).

IMPORTANT!
The product is designed for professional industrial use. Information about the safety use of the product is found in the Safety Data Sheet for the FARBACOUT VINYLESTER coating series.

APPLICATION METHOD

Coatings series FARBACOAT VINYLESTER are supplied in two containers. It is necessary to mix such an amount that will be guaranteed spent for 0.5 ... 1.0 h
(depending on the modification of the coating) in appropriate proportions.
Preparation of the coating - add component to the mechanically mixed component I.

Mix in a weight ratio:
- Component I 100 m.h.
- Component II 2 m.h.

Stir the mixture until uniform.
It is not recommended to stir the mixture intensively, as air may get into the mixture.
There is no need to dilute the product.

The suitability of the mixture is 0.5 ... 1.0 h at a temperature of 20 °C. High temperatures reduce service life, while lower temperatures prolong it.
After mixing the components, the product must be used within the indicated period of service life.

METHOD OF APPLYING THE FINISHED COATING
- airless spraying: ø 0.38-0.53 mm; 15 - 20 MPa
- brush
- roller
- spatula
- centrifugation

APPLICATION

Surface.
The cleaner the surface on which the mixture is applied, the more resistant the coating will be. Coatings applied directly to steel surfaces that have been sandblasted to a minimum degree of purification Sa 2½ have the highest chemical and mechanical resistance.

- The surface of the steel is dry, free from contamination, degreased - cleaned to at least to Sa 2½ degree for submerged surfaces or at least to St 2 degree for external surfaces.
- The surface prepared for coating should be dry, free from salt, grease, dust and other contaminants;
- Before applying the coating to the concrete surface, it must be cleaned of fats, oils, liquid bituminous masses and detergents. If the concrete is new (min C20/25), be sure to remove the lime milk. Smooth concrete should be mechanically brought to a roughness, for example by easy bead-blasting treatment to get a CSP-3 profile (according to ICRI). In case of renovation, the concrete surface should have at least CSP1 profile, as well as adhesion at the level of> 1.0 MPa in the tear test.
- If the coating is used in aggressive conditions, it is recommended to prepare the surface in the best way, it is allowed to apply subsequent layers until the previous layer is completely cured.

COATING FULL CURE TIME
- 20°C – 2 days
- 15°C – 3 days

Use with caution.
Packages contain appropriate safety signs that must be observed.

COATING APPLICATION AND CURING CONDITIONS:
- minimum surface temperature: 12°C;
- surface temperature above the dew point (avoid condensation);
- relative air humidity not higher than 85%;
- excellent ventilation.

PACKAGING
– kcomponent I - metal bucket vol. 20 l, net weight - 24.5 kg
– component II - polypropylene capacity vol. 0.55l, net weight - 0.5 kg

COATINGS SERIES

FARBACOAT POLYESTER

Abrasive resistant two-component thick-layer coatings with high solids content and high corrosion resistance. They are a composition based on isophthalic polyester resin and a number of special organic and inorganic fillers and additives.

Depending on the type and number of special fillers and additives of the coating of the «FARBACOAT POLYESTER» series, the following modifications are made:

- **«FARBACOAT POLYESTER 41»** - primer, for priming and impregnating glass materials, applied by brush, roller, airless spraying;
- **«FARBACOAT POLYESTER 42»** - for lining pipes by the centrifugal method;
- **«FARBACOAT POLYESTER 43»** - lining, for application by brush or roller;
- **«FARBACOAT POLYESTER 44»** - lining, increased thixotropy, for applying with a spatula;
- **«FARBACOAT POLYESTER 45»** - repair, for filling of shells, cracks, cavities and alignment (smoothing) of welds, for applying with a spatul

ADVANTAGES

- very high adhesion to steel and concrete surfaces;
- high mechanical stability;
- the coating is resistant to the damaging effects of aggressive environment.

RECOMMENDATIONS FOR USE

Used to protect internal surfaces of pipelines, metal tanks, tanks, process equipment, concrete tanks, general-purpose metal structures where high protection against chemical attack is required, as well as at high abrasive loads of the environment.

SPECIFICATIONS

Density (approx.), kg/dm^3	1,22-1,87
Recommended thickness of the dry/wet layer, μm	300/340
Drying time (20 °C): up to degree 3, h	2
Suitability of the mixture for use at 20°C, h	0,5..1
Time of complete curing of the coating at 20°C, days	2
at 15°C, days	3
Theoretical consumption for a dry coating 1000 μm thick, lkg/m^2	1,25
Dry residue (± 2), % weight	92-97
Number of layers	3-4

COATING TYPE
semimatte

COLORS
gray, light green.
Tinting in other colors is possible.

SHELF LIFE
when stored in closed factory packaging at a temperature of 5-35 °C - 6 months from the date of manufacture for component I (base) and 6 months for component II (curing agent).

IMPORTANT!
The product is designed for professional industrial use. Information about the safety use of the product is found in the Safety Data Sheet for the «FARBACOAT POLYESTER» coating series.

APPLICATION METHOD

Coatings series FARBACOAT POLYESTER are supplied in two containers. It is necessary to mix such an amount that will be guaranteed to be spent within 0.5..1 h in appropriate proportions. **Preparation of the coating** - add component II to the mechanically mixed component I and mix it thoroughly.

Mix in a weight ratio:
- Component I 100 m.h.
- Component II 2 m.h.

Stir the mixture until uniform.
It is not recommended to stir the mixture intensively, as air may get into the mixture.
There is no need to dilute the product.

The mixture is suitable for use within 1 hours at 20 °C. High temperatures reduce service life, while lower temperatures prolong it.
After mixing the components, the product must be used within the indicated period of service life.

METHOD OF APPLYING THE FINISHED COATING
- airless spraying: ⌀ 0.38-0.53 mm; 15 - 20 MPa
- brush
- roller
- spatula
- centrifugation

APPLICATION

The cleaner the surface on which the mixture is applied, the more resistant the coating will be. Coatings applied directly to steel surfaces that have been sandblasted to a minimum degree of purification Sa 2½ have the highest chemical and mechanical resistance.

COATING FULL CURE TIME
- 20°C – 2 days
- 15°C – 3 days

- The surface of the steel is dry, free from contamination, degreased - cleaned to at least Sa 2 degree for immersed surfaces or at least to St 2 degree for external surfaces;
- the surface prepared for coating should be dry, free from salt, grease, dust and other contaminants;
- Before applying the coating to the concrete surface, it must be cleaned of fats, oils, liquid bituminous masses and detergents. If the concrete is new (min C20/25), be sure to remove the lime milk. Smooth concrete should be mechanically brought to a roughness, for example by easy bead-blasting treatment to get a CSP-3 profile (according to ICRI). In case of renovation, the concrete surface should have at least CSP1 profile, as well as adhesion at the level of > 1.0 MPa in the tear test.
- If the coating is used in aggressive conditions, it is recommended to prepare the surface in the best way, it is allowed to apply subsequent layers until the previous layer is completely cured.

Use with caution.
Packages contain appropriate safety signs that must be observed.

COATING APPLICATION AND CURING CONDITIONS:
- minimum surface temperature: 12°C;
- surface temperature above the dew point (avoid condensation);
- relative air humidity not higher than 85%;
- excellent ventilation.

PACKAGING
– component I - metal bucket vol. 20 l, net weight - 24.5 kg
– component II - polypropylene capacity vol. 0.55 l, net weight - 0.5 kg

COATINGS SERIES

FARBACOAT PROTECT

Elastomeric polyurethane sprayed waterproofing coating FARBACOAT PROTECT is a two-component coating with 100% high quality dry residue; the coating is applied on various surfaces: metal (steel, aluminum), concrete (cement/construction), wood or polyurethane insulating foams. FARBACOAT PROTECT coating is recommended for structures that require protection against water, salt solutions, abrasive dry and hydroabrasive wear, as well as for high mechanical resistance to impacts and cuts.

RECOMMENDATIONS FOR USE

FARBACOAT PROTECT coating is used to protect internal and external surfaces.
It perfectly suits for protection of bunkers, tanks and various technological equipment, which is exposed to intensive hydroabrasive and abrasive impact. It is used for waterproofing of foundations, balconies, cellars and terraces, as well as drain holes; the coating is used as a protection of concrete floors in industrial and warehouse premises, at facilities that are associated with the production, sorting and storage of food products. FARBACOAT PROTECT is used as a protective coating for wastewater tanks and septic tanks. FARBACOAT PROTECT is able to change color under the active influence of UV radiation while maintaining positive mechanical properties. When it is necessary to get a stable color, it is recommended to apply a protective coating FARBACOAT URETHANE on the top of FARBACOAT PROTECT 35.

SPECIFICATIONS

Product Feature (Component A–ISO and B–Polyol)

Component viscosity A, B (25°C)	900 mPa*s, 600 mPa*s
Volatile content	0%
Density A, B (25°C)	1.11 g/cm^3, 1.05 g/cm^3
Gelation time (18°C)	3-5 seconds
Drying time to “dry to touch” degree (18°C)	6-8 seconds
Overlap interval	от 1 h до 12 h
Mix ratio	1:1 (volume)
Recommended thickness	1.5-4.0 mm
Consumption (theoretical)	1,08 kg/m^2 with a thickness of 1 mm

Physical properties of the coating (thickness 2mm)

Tensile strength after 24 h	min 16 MPa
Elongation at a break after 24 h	min 400 %
Tensile strength (min)	22 MPa
Elongation at break (min)	450%
Adhesion to the base (steel)	>5 MPa
Adhesion to the base (concrete)	>1.5 MPa

SHELF LIFE
Component A - 6 months, component B - 12 months from the date of manufacture when stored in closed factory packaging at a temperature. .. After this period, it can be used only after laboratory tests.

IMPORTANT!
The product is designed for professional industrial use. Information about the safe use of the product is found in the Safety Data Sheet for the FARBACOAT PTOTECT Coating.

Shore hardness	96A, 45D
Abrasion (Taber index, 1000g/1000 cycle, wheels H22)	<100 mg
Crack overlap (-20 °C)	Class A5 (>2.5 mm)
Water absorption (7 days)	Up to 2%
Application temperature*	-30°C до +90°C**

** – temporarily up to +240°C

Application

It is recommended to apply the FARBACOAT PROTECT coating only on well-prepared, primed horizontal or vertical surfaces. For priming, use FARBACOAT PRIME. The concrete surface should be clean of dirt, grease, oil, liquid bitumen and detergents. Permissible moisture content in concrete - 5%.

When applied to a new concrete, it is necessary to remove the lime milk using a sand blasting or water-jet blasting device. Steel surfaces must be degreased, mechanically cleaned (to SA2½ S). Be sure to use an epoxy primer. FARBACOAT PROTECT is available in barrels of 200 l and 50 l. Component A and B are mixed in a 1:1 volume ratio.

The thickness of the applied layer is different (from 1.0 mm to 10 mm and more), it depends on the coating requirements. Generally, the thickness of 1.5-2.0 mm is sufficient to ensure high waterproofing properties and excellent chemical, mechanical and anti-corrosion resistance. FARBACOAT PROTECT is applied mechanically using a high-pressure spraying apparatus, such as **Reactor Graco EXP–2.**

Spraying parameters:

- component A: 65-80°C
- component B: 65-80°C
- pressure: 160-200 bar
- hose temperature: min 65°C
- ambient temperature: from -20°C to +50°C
- air humidity: max 90%
- surface temperature: 3°C above the dew point

Component B (polyol) contains a pigment that can undergo sedimentation during storage. To prepare the mixture, it is necessary to mix the contents of the barrel using a mechanical stirrer. Dilution with solvents is not required. For equipment cleaning, it is recommended to use the plasticizer DBP (equipment washing) or solvents for polyurethanes (e.g. xylene) Commercially available solvents for polyurethanes (xylene) are recommended for cleaning elements contaminated with FARBACOAT PROTECT. FARBACOAT PROTECT can change color under the action of UV rays for several weeks depending on the sunlight intensity. However, the color change does not affect the mechanical, waterproofing and anti-corrosion properties. If the coating is applied to a surface exposed to negative external factors, carefully select the appropriate protective coating together with the manufacturer.

Chemical resistance

The waterproofing coating FARBACOAT PROTECT is highly resistant to dilute alkalis, acids (1-14 pH), detergents, alcohols, fuels and petroleum products, aqueous salt solutions KCl, NaCl, MgCl2, CaCl2. For more information about other chemical properties, contact the manufacturer.

STORAGE

Store at +10°C to +30°C.
During storage at temperatures below +10°C, the isocyanate component may crystallize!
When solid particles appear, the product should be heated to 40-50°C for 24 hours.

Before using FARBACOAT PROTECT, it is necessary to stir component B to get a uniform color without stripes and streaks.

COATINGS SERIES

FARBACOAT TERMOFUR

Thermal shielding coating FARBACOAT THERMOFUR is a pasty product with low density and thermo-shielding properties. The finished coating creates in a thin dry layer a structure with closed pores filled with rarefied air, the content of which in the volume does not exceed 85%. The coating is adapted for use with electric heating systems, pipelines and tanks of various types. It can be successfully used in corrosion protection systems and as an independent coating in marine and industrial environments.

SCOPE OF APPLICATION

- pipelines for various purposes;
- capacitive equipment;
- furnace equipment;
- storages and reservoirs;
- equipment and machinery;
- basement, basement rooms;
- various technical premises.

SPECIFICATIONS

Appearance – a uniform pasty mass of white color

with duration of drying of the film surface to degree 3 at (20 ± 2)°C, min, no more than	60
Density, g/cm^3	до 0,6
Bending elasticity of the film, mm	1
Adhesion coating, score	1
Resistance to variable temperatures from minus 40 to plus 60°C	without changes
The resistance of the coating to the effects of a temperature of +200°C in 1.5 h	no cracks, delaminations, bubbles
Heat conductivity, W/m*K at 20°C, no more than	0,068

CONSUMER PROPERTIES

- Eliminates corrosion under insulation;
- In anticorrosion systems, the coating is used as a finishing layer that prevents the system from contact with the environment, preventing cracking of the primer layer under the action of alternating loads or vibrations;
- Water repellency;
- Eeliminates condensation;
- Lowers surface temperature;
- Protects personnel from burns;
- Significantly reduces the destructive effect on thermal insulation under a “shock” thermal load (cyclic or rapid temperature difference);

SHELF LIFE

12 months from the date of manufacture in the original packaging in a dry room at a temperature of + 5 °C and higher.

PRECAUTIONS

Thermal shielding coating FARBACOAT THERMOFUR is non-toxic, chemically inert, explosion proof, not combustible, under normal weather conditions does not emit products harmful and dangerous to the human body, does not have a harmful effect on the human body even with direct contact.

- Serves as an additional heat insulating layer without breaks and seams;
- Does not put an additional load on equipment, pipelines and machinery, due to low weight;
- The coating can be applied in hard-to-reach places, on fittings.

APPLICATION

- When using FARBACOAT THERMOFUR as an independent coating, it is recommended to apply it in 2-3 layers, until the total thickness of 1.5-2.0 mm is reached. It is this coating thickness that is sufficient to effectively lower the temperature of hot surfaces and eliminate condensate phenomena.
- If FARBACOAT THERMOFUR is used as part of a complex coating, the combined use of the following materials is recommended:

1 layer – epoxy coating FARBACOAT EPOXY 20: with thickness up to 150 microns;
2 layer – thermal shielding coating FARBACOAT THERMOFUR: from 2 mm;
3 layer – polyurethane coating FARBACOAT URETHANE 30/35: thickness up to 50 microns.

The appointment of materials in the system:
– Epoxy coating FARBACOAT EPOXI 20 is a two-component anti-corrosion material. It provides reliable anti-corrosion protection and adhesion of the coating with the insulated surface.
– Thermal shielding coating FARBACOAT THERMOFUR is responsible for thermal and thermal insulation properties in the system.
– Polyurethane coating FARBACOAT URETHANE 30/35 is a two-component material that provides the system with decorative (color of choice) properties.
Consumption when applying a thermal shielding coating FARBACOAT THERMOFUR without taking into account losses is 1.4 l/sq. m. with a coating thickness of 1 mm.

RECOMMENDATIONS FOR USE

Surface preparation
Abrasive Blast Cleaning – Sa 2½ to ISO 8501-1.
When repairing the surface, the welds and all damaged areas should be cleaned to the degree of Sa 2½.
After surface treatment, remove dust, abrasive residues and ensure rounding of sharp edges.
During long-term storage of primed structures, salt, zinc oxides and other contaminants are removed from the surface before applying the next coating layer. Water jetting to Wa1 grade is used.
Primer
A well-cleaned surface is covered with FARBACOUT EPOXY 20 or other analogs agreed with the manufacturer.
Application method
Airless, brush. Apply in several layers to obtain the required thickness. The thickness is not standardized.
Application conditions:
- air temperature from +5°C;
- relative air humidity up to 85%.

PRIMER

FARBACOAT SYNERGY 10

FARBACOAT SYNERGY 10 is a single component reactive passivation primer. It is characterized by high adhesion to various bases: steel, aluminum, galvanized steel, zinc-aluminum alloys, polyester, polyamide, plexiglas. It is used as a penetrating coating that increases the adhesion of subsequent layers. The primer is highly resistant to corrosion and ideal for application to weak (with low adhesion) bases.

ADVANTAGES

- high adhesion to various bases;
- deep penetration primer;
- high corrosion resistance;
- ideal for application to low adhesion bases.

RECOMMENDATIONS FOR USE

- for all-round use in industry;
- to increase adhesion to difficult-to-wet bases;
- as a layer connecting the base with the next layer;
- as a corrosion protection of the base;
- it is an ideal basis for paints and varnishes of the Farbakout Profi series.

SPECIFICATIONS

Density (approx.), kg/dm^3	40/90
Recommended thickness of the dry/wet layer, μm	1,20
drying time (20°C): to degree 1 (from dust), min	10
to degree 3 (dry to the touch), min	20
Theoretical consumption for a layer 40 μm thick, l/m^2	0,09
Dry residue (± 2), % vol.	45
VOC content in a ready-to-use product, g/l	600
Recommended number of layers	1-2

COATING TYPE
matte

COLORS
red oxide

SHELF LIFE
9 months from the date of manufacture when stored in closed factory packaging at a temperature of from +5 to +35 °C

APPLICATION METHOD

Before applying, the primer FARBACOAT SYNERGY 10 should be thoroughly mixed.

Application method:

- airless spraying: ⌀ 0,28-0,43 mm;
- 10 - 17 MPa;
- brush;
- immersion;
- roller;

air spraying (after dilution to viscosity 25-30s according to viscometer B3-246, nozzle ⌀ 4

RECOMMENDATIONS FOR USE

The cleaner **the surface** on which the mixture is applied, the more resistant the coating will be.

Steel

Coatings applied directly to steel surfaces that have been sandblasted to a minimum degree of purification Sa 2½ according to ISO 8501 or 2 according to GOST9.402, have the highest chemical and mechanical resistance.

The surface prepared for coating should be dry, free from salt, grease, dust and other contaminants.

To avoid moisture condensation, the surface temperature should be above the dew point temperature by at least 3°C.

Aluminum surfaces are dry, treated with fine abrasive material.

Galvanized surfaces must be free from all possible contamination, corrosion products of zinc.

The surface of polyester, polyamide, plexiglas is dry, degreased, free from dirt, grease and dust.

Subsequent painting

Paintwork materials of the Farbacoat Profi series. Do not apply polyester paints and fillers, as well as paints containing metallic zinc. It is not recommended to apply the Farbacoat Synergy 10 primer for epoxy paints if the coating is in permanent immersion (weakening of interlayer adhesion).

Overlap interval:

- minimum at 20 °C – 10 min;
- maximum at 20 °C – 24 h.

Application conditions:

- minimum air temperature + 5 °C;
- surface temperature above the dew point at 3 °C (avoid condensation);
- relative air humidity up to 90%;
- excellent ventilation.

Use with caution.
Packages contain appropriate safety signs that must be observed.

DILUENT
Farbacoat Diluent 10

IMPORTANT!
The product is designed for professional industrial use. Information about the safe use of the product is found in the Safety Data Sheet for the coating.

PRIMER
FARBACOAT
SYNERGY 12

Two-component, anti-corrosion, epoxy primer with very good strength, high protective and insulating properties. The primer adheres very well to various bases, it is durable to mechanical damage, elastic and resistant to scratches. It can be covered with surface lacquers and paints, and the next layer can be applied without waiting for the full drying of the previous layer.

ADVANTAGES

- active corrosion protection of cars, trucks, tractors;
- very good adhesion to steel, galvanized steel, aluminum, polyester laminate;
- the ideal basis guaranteeing high durability and a magnificent type of a layer of varnishes and paints;
- ideal for places where corrosion resistance is required.

SPECIFICATIONS

Density (approx.), kg/dm^3	1,3
Recommended thickness of the dry/wet layer, μm	40/75
application time after mixing the components at 20°C, h	5
drying time (20°C) to degree 3 (to the touch), min	60
theoretical consumption for a layer 40 μm thick, l/m^2	0,08
nonvolatile components content (approx.), % of mixture weight	68
VOC (cat. B/3) allowed, g/l	540
VOC in the product, g/l, depending on the dissolution	420-510
Recommended number of layers	1-2

APPLICATION METHOD

Primer FARBACOAT SYNERGY 12 is supplied in two containers. To prepare the coating, mix the full amount of the two containers in the specified proportions.

Preparation: add component II to the mechanically mixed component I and mix it thoroughly.

Mix in the following ratio:

	Volume:	Weight:
- Component I	2	100
- Component II	1	30

COATING TYPE
semimatte

COLORS
light gray, dark gray

SHELF LIFE
12 months from the date of manufacture for component I, 6 months for component II; stored in closed factory packaging at a temperature of 5–35°C

Application method:

- airless spraying;
- brush;
- air spraying – after adding 10-15% of diluent to a viscosity of approx. 20-25 s, viscometer VZ-246 ø 4 mm:

nozzle diameter	1,2– 1,6 mm
jet pressure	3,0 – 4,0 atm
recommended use	2-3 layers

The option of applying "wet on wet" (when you can apply the next layer, without waiting for the full drying of the previous layer):
Apply 2 separate wet layers, leaving for 10-15 minutes after each layer for evaporation. The evaporation time depends on the temperature and layer thickness.
If the time of applying the next layer is more than 12 hours, then the coating should be sanded.
It is possible to cure the coating at an elevated temperature (60-70°C) after 25 minutes from the moment of application of the last layer (time is necessary to obtain adequate fluidity and preliminary evaporation of solvents).

RECOMMENDATIONS FOR USE

The surface - the cleaner the surface on which the mixture is applied, the more resistant the coating will be.
Coatings applied directly to steel surfaces that have been sandblasted to a minimum degree of purification Sa 2 1/ 2 according to ISO 8501or 2 according to GOST9.402, have the highest chemical and mechanical resistance.
The surface prepared for coating should be dry, free from salt, grease, dust and other contaminants.
To avoid moisture condensation, the surface temperature should be above the dew point temperature by at least 3 °C.
Unprepared surfaces of dip galvanized steel, and aluminum surfaces are dry, matted with fine-grained emery materials; galvanized surfaces should be free from various contaminants and corrosion products of zinc. Cleaning with hot water, water under pressure, abrasive cleaning or manual cleaning using power tools.
To obtain the best corrosion protection, the total thickness of the layers should not be less than 80 microns.

Conditions during application:
- minimum air temperature is 5 °C;
- surface temperature above the dew point (to avoid condensation);
- relative humidity should not exceed 85%;
- excellent ventilation.

DILUENT
FARBACOAT DILUENT 20

IMPORTANT!
The product is designed for professional industrial use. Information about the safe use of the product is found in the Safety Data Sheet for the coating.

PRIMER
FARBACOAT
SYNERGY 14

Two-component, epoxy, filling primer with high coating adhesion, high anti-corrosion and insulating properties. It is characterized by high adhesion to various bases, mechanical stability and elasticity.
It is an ideal base for automobile paints and varnishes.

ADVANTAGE

- active corrosion protection of cars, trucks, tractors;
- very good adhesion to steel, galvanized steel, aluminum, polyester laminate;
- the ideal basis guaranteeing high durability and a magnificent type of a layer of varnishes and paints;
- everywhere where high corrosion resistance is required.

SPECIFICATIONS

Density (approx.), kg/dm^3	1,4
Recommended thickness of the dry/wet layer, µm	40/65
application time after mixing the components at 20°C, h	8
drying time (20°C) to degree 3 (to the touch), min	2
theoretical consumption for a layer 40 µm thick, l/m^2	0,07
nonvolatile components content (approx.), % of mixture vol.	70
VOC (cat. B/3) allowed, g/l	540
VOC in the product, g/l, depending on the dissolution	420-510
Recommended number of layers	2

APPLICATION METHOD

Primer FARBACOAT SYNERGY 14 is supplied in two containers. To prepare the coating, mix the full amount of the two containers in the specified proportions.
Preparation: add component II to the mechanically mixed component I and mix it thoroughly.
Mix in the following ratio:

	Volume:	Weight:
- Component I	3	5
- Component II	1	1

COATING TYPE
semimatte

COLORS
light gray, dark gray

IMPORTANT!
The product is designed for professional industrial use. Information about the safe use of the product is found in the Safety Data Sheet for the coating.

Application method:

- airless spraying;
- brush;
- air spraying – after adding 10-15% of diluent to a viscosity of approx. 35-40 s, viscometer VZ-246 ø 4 mm:

nozzle diameter	1,6–2,2 mm
jet pressure	3,0–4,0 atm
recommended use	2–3 layers
time to evaporate the diluent between the layers	25 min

The possibility of drying the primer at an elevated temperature (60-70 °C) for about 40 minutes after applying the last layer (the required time to obtain the appropriate spreading of paint and pre-evaporation of diluents).

RECOMMENDATIONS FOR USE

The cleaner **the surface** on which the mixture is applied, the more resistant the coating will be.
Coatings applied directly to steel surfaces that have been sandblasted to a minimum degree of purification Sa 2 / according to ISO 8501 or 2 according to GOST9.402, have the highest chemical and mechanical resistance.
The surface prepared for coating should be dry, free from salt, grease, dust and other contaminants.
To avoid moisture condensation, the surface temperature should be above the dew point temperature by at least 3 °C.
Unprepared surfaces of dip galvanized steel, and aluminum surfaces are dry, matted with fine-grained emery materials; galvanized surfaces should be free from various contaminants and corrosion products of zinc. Cleaning with hot water, water under pressure, abrasive cleaning or manual cleaning using power tools.
To obtain the best corrosion protection, the total thickness of the layers should not be less than 80 microns.

Conditions during application:

- minimum air temperature is 5 °C;
- surface temperature above the dew point (to avoid condensation);
- relative humidity should not exceed 85%;
- excellent ventilation.

Use with caution. Packages contain appropriate safety signs that must be observed.

SHELF LIFE
12 months from the date of manufacture for component I, 6 months for component II; stored in closed factory packaging at a temperature of 5-35 °C

DILUENT
Farbacoat Diluent 20

PAINT
FARBACOAT
SYNERGY 16

Coating, two-component, polyurethane paint for general use. It provides high-quality decorative quick-drying coatings of high resistance with high gloss, perfect color and excellent UV resistance.

ADVANTAGES

- high resistance to atmospheric factors and abrasion;
- perfect color and shine resistance;
- high mechanical stability;
- high decorative properties of the coating: it does not form a chalky deposit and does not turn yellow;
- the coating is resistant to oil splashes, aggressive chemicals.

SPECIFICATIONS

Density (approx.), kg/dm^3	1,1
Recommended thickness of the dry/wet layer, μm	30/70
drying time (20°C): to degree 1 (from dust), min	45
to degree 3 (dry to the touch), min	3
theoretical consumption for a layer 30 μm thick, l/m^2	0,07
nonvolatile components content (approx.), % of mixture vol.	40
VOC content in a ready-to-use product, g/l	470
Recommended number of layers	2

APPLICATION METHOD

Paint FARBACOAT SYNERGY 16 is supplied in two containers. To prepare the coating, mix the full amount of the two containers in the specified proportions.

Mix preparation:

Mix components in volume ratio:

Component I	2
Component II	1

After 15 minutes (at a temp. of 20 °C) the mixture is ready for use.

COATING TYPE
high gloss

COLORS
Available in the RAL color palette or according to customer samples.

SHELF LIFE
9 months from the date of manufacture for component I, 6 months for component II; stored in closed factory packaging at a temperature of 5-35 °C

Application conditions:

- brush;
- air spraying - after adding 15-25% of diluent to a viscosity of approx. 20-22 s, viscometer VZ-246 4 mm:

  nozzle diameter 1,2– 1,4 mm
  jet pressure 2,5 – 3,0 atm

  Spray at a distance of 20-25 cm from the surface.

The possibility of drying the primer at an elevated temperature (60-70 °C) for about 40 minutes after applying the last layer (the required time to obtain the appropriate spreading of paint and pre-evaporation of diluent).

APPLICATION

Polyurethane paint is applied to the previously applied and dried primer Farbacoat Epoxy and Farbacoat Synergy. It should be applied in 2 layers, leaving time for evaporation for 20-30 minutes between layers (depending on the temperature and thickness of the coating).

Conditions during application:

- minimum air temperature 10 °C;
- surface temperature above the dew point (to avoid condensation);
- relative humidity should not exceed 80%;
- excellent ventilation.

DILUENT
Farbacoat Diluent 30

IMPORTANT!
The product is designed for professional industrial use. Information about the safe use of the product is found in the Safety Data Sheet for the coating.

PRIMER

FARBACOAT

EP-045

Two-component epoxy primer has high anti-corrosion and physical properties, it can be used in temperate, cold and tropical climates.

ADVANTAGES

- the possibility of applying a large thick wet film;
- high mechanical stability;
- very high adhesion to steel, galvanized and aluminum surfaces.

RECOMMENDATIONS FOR USE

The Fabracoat EP-045 primer is designed for high-quality anti-corrosion protection of metal products (carbon and galvanized steel, copper, aluminum and its alloys), in machine building, machine building, car building and shipbuilding, in construction and other industries, as well as during repair works.

SPECIFICATIONS

Recommended thickness of the dry/wet layer, μm	50/120
drying time (20°C): up to degree 3, h	6
suitability of the mixture for use at 20°C, h, at least	8
theoretical consumption for a dry coating 60 μm thick, l/m^2	180
dry residue (± 2), % weight	65
Number of layers	1-2

APPLICATION METHOD

Primer Farbacoat EP-045 is supplied in the form of two components: a semi-finished primer and an F-45 hardener.

COATING TYPE
matte

COLORS
brown beige

WARRANTY SHELF LIFE
6 months from the date of manufacture for component I, 6 months for component II; stored in closed factory packaging at a temperature of 5-35 °C

Preparation
The components are mixed by the consumer immediately before use, 14 parts by weight of F-45 hardener is added to 100 parts by weight of the semi-finished primer.
Maintain primer 15-30 minutes and dilute to working viscosity with solvent P-5A or P-5.
For application by pneumatic spraying, a working viscosity of 12-15 seconds viscometer B3-246 (nozzle 4 mm).
To apply a brush or the roller a primer with initial viscosity, to dilute if necessary.
For airless spraying, the working viscosity depends on the equipment used. Viability of a primer diluted to working viscosity with a hardener for at least 8 hours at a temperature of (20 ± 2)°C.
After mixing the components, the product must be used within the indicated pot life.

Application method – after mixing the components

- airless spraying: ⌀nozzles 0,28-0,43 mm; pressure of 10-15 MPa;
- brush;
- roller;
- air spraying: ⌀nozzles 1.9-2.5 mm (after dilution to a viscosity of 15c according to viscometer VZ-246, nozzle ⌀ 4 mm).

APPLICATION

The cleaner **the surface** on which the mixture is applied, the more resistant the coating will be. Coatings applied directly to steel surfaces that have been sandblasted to a minimum degree of purification Sa 2½ according to ISO 8501 or 2 according to GOST9.402, have the highest chemical and mechanical resistance.

- The surface prepared for coating should be dry, free from salt, grease, dust and other contaminants.
- To avoid moisture condensation, the surface temperature should be above the dew point temperature by at least 3 °C.

The drying time of a single-layer coating at a temperature of (20 ± 2)°C is 6 hours.
At a lower temperature or relative humidity of more than 65%, the drying time can be increased. After drying one layer, the subsequent layers are applied similarly, with a minimum overlap interval of 1 hour.

Packaging:
- semi-finished primer - metal bucket of approx. 20 l, metal drums of approx. 45 l
- hardener - glass bottles, metal cans, polypropylene containers of approx. 0.5 l, 1 l.

Use with caution.
Packages contain appropriate safety signs that must be observed.

DILUENT
SOLVENT: P5 OR **P**5A

IMPORTANT!
The product is designed for professional industrial use. Information about the safe use of the product is found in the Safety Data Sheet for the coating.

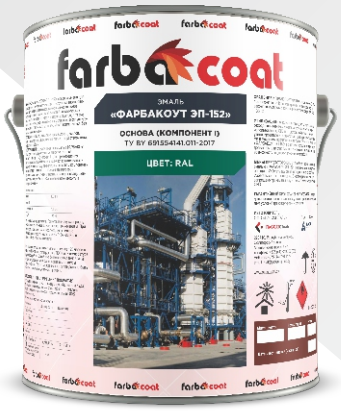
ENAMEL

FARBACOAT EP-152

Enamel Farbacoat EP-152 is a two-component enamel that forms a coating that combines the high adhesive and protective properties of epoxy and perchlorovinyl enamels. The coating is quick-drying and has water, oil, petrol and salt resistance, as well as weather resistance properties.

ADVANTAGES

- the possibility of applying a large thick wet film;
- high mechanical stability.



RECOMMENDATIONS FOR USE

Used to protect internal surfaces of pipelines, metal tanks, tanks, process equipment, concrete tanks, general-purpose metal structures where high protection against chemical attack is required, as well as at high abrasive loads of the environment.

SPECIFICATIONS

Recommended thickness of the dry/wet layer, μm	35/100
drying time (20°C): up to degree 3, h	1
suitability of the mixture for use at 20°C, h, at least	
hardener No. 1	120
PEPA	48
Time of complete curing of the coating at 20 °C, days	2
theoretical consumption for a dry coating 70 μm thick, l/m^2	280
dry residue (± 2), % weight	35...40
Number of layers	2

COATING TYPE
matte

COLORS
green, black, sulfur, light gray, red-brown. Enamel tinting is possible according to the RAL catalog.

WARRANTY SHELF LIFE
6 months from the date of manufacture for components I and II; stored in closed factory packaging at a temperature of 5-35 °C

APPLICATION METHOD

Enamel Farbacoat EP-152 comes in two containers.

Preparation
To prepare the enamel, you must first mix thoroughly the base and add to 100 cc. = 1.1 cc hardener No. 1 or 0.55 cc. PEPA, mix again and keep it for 30 minutes. If necessary, after adding the hardener, the enamel can be diluted to a working viscosity with a solvent R-5A or R-5 in an amount of not more than 50% of enamel weight.

The suitability of the mixture is 120 hours with hardener No.1 and 48 hours with hardener PEP at a temperature of 20 °C. High temperatures reduce service life, while lower temperatures prolong it.

After mixing the components, the product must be used within the indicated period of service life.

Method of applying the finished enamel:
- airless spraying: nozzle ⌀ 0.28-0.43 mm; pressure 10-15 MPa;
- brush;
- roller;
- air spraying: nozzle ⌀ 1.7-2.0 mm (after dilution to a viscosity of 14-20 s according to viscometer VZ-246, nozzle⌀ 4 mm).

APPLICATION

The surface - the cleaner the surface on which the mixture is applied, the more resistant the coating will be.
Coatings applied directly to steel surfaces that have been sandblasted to a minimum degree of purification Sa 2½ according to ISO 8501 or 2 according to GOST9.402, have the highest chemical and mechanical resistance.
The surface prepared for coating should be dry, free from salt, grease, dust and other contaminants.
To avoid moisture condensation, the surface temperature should be above the dew point temperature by at least 3°C. Drying time of a single-layer coating at a temperature of (20±2)°C is not more than 60 minutes. At a lower temperature or relative humidity of more than 65%, the drying time can be increased. After drying one layer, the subsequent layers are applied similarly, with a minimum overlap interval of 1 hour.

Use with caution.
Packages contain appropriate safety signs that must be observed.

PACKAGING
- semi-finished enamel - metal bucket of approx. 20 l, metal drums of approx. 45 l
- hardener - glass bottles, metal cans, polypropylene containers of approx. 0.5 l, 1 l.

PRIMER-ENAMEL

FARBACOAT PROFI 60

Alkyd primer-enamel FARBACOAT PROFI 60 is designed to protect process equipment, machinery, mechanisms, mining equipment, automotive and agricultural equipment for various purposes, resistant to atmospheric and mechanical factors. The enamel can be applied without prior priming. Available in the RAL color palette or according to customer samples. It is recommended to be used as a single layer finishing system for anti-corrosion protection.

ADVANTAGES

- high dry residue of non-volatile components (70% of weight) compared to other alkyd enamels widely available on the market;
- reduced primer-enamel consumption to get the desired dry film thickness;
- improved rheological and thixotropic properties;
- the possibility of applying a wet film thickness of up to 300 microns on vertical surfaces without the formation of stains.

SCOPE OF APPLICATION

For painting:

- structures used in the field of marine, river, urban and industrial use;
- technological equipment, machines, mechanisms;
- mining equipment;
- automotive and agricultural equipment for various purposes;
- residential equipment (sanitary equipment, fittings, etc.);
- balustrades, fences, railings, decorative steel elements.

SPECIFICATIONS

density (approx.), kg/dm	31,25
Recommended thickness of the dry/wet layer, μm	52/80
drying time (20°C): to degree 1 (from dust), min	15
to degree 3 (dry to the touch), min	30
Theoretical consumption for a dry coating 52 μm thick, lkg/m^2	0,1
solids content (± 2), % vol.	65
solids content (± 2), % weight	70
VOC content in a ready-to-use product, g/l	385
Recommended number of layers	1-2

COATING TYPE
semimatte

COLORS
Available in the RAL color palette or according to customer samples.

WARRANTY SHELF LIFE
12 months from the date of manufacture for components I and II; stored in closed factory packaging at a temperature of 5-35 °C

APPLICATION METHOD

Before applying, the primer-enamel FARBACOAT PROFI 60 should be thoroughly mixed.

Application method:

- airless spraying: nozzle ⌀ 0.38-0.48 mm; pressure 10-17 MPa;
- brush;
- pneumatic spraying: nozzle ⌀ 1.8-2.5 mm (in this case it is necessary to dilute to a viscosity of about 80s, viscometer VZ-246⌀ 4 mm).

RECOMMENDATIONS FOR USE

The surface - the cleaner the surface on which the mixture is applied, the more resistant the coating will be.
Coatings applied directly to steel surfaces that have been sandblasted to a minimum degree of purification Sa 2½ according to ISO 8501 or 2 according to GOST9.402, have the highest chemical and mechanical resistance.
The surface prepared for coating should be dry, free from salt, grease, dust and other contaminants.
To avoid moisture condensation, the surface temperature should be above the dew point temperature by at least 3°C.

Application conditions:

- surface temperature above the dew point at 3°C (avoid condensation);
- excellent ventilation.

Use with caution. Packages contain appropriate safety signs that must be observed.

PACKAGING
PRIMER-ENAMEL comes in metal buckets of 10l and 20l

DILUENT
solvent, nefras, white spirit 0 - 20% vol.

IMPORTANT!
The product is designed for professional industrial use. Information about the safe use of the product is found in the Safety Data Sheet for the coating.

PRIMER

FARBACOAT PROFI 63

Product description: alkyd modified primer, quick-drying, matte. Thixotropic primer with anti-corrosion properties. The coating is characterized by high adhesion to various bases and mechanical stability.

ADVANTAGES

- very high adhesion to steel surfaces;
- high mechanical stability.

RECOMMENDATIONS FOR USE

Designed for priming steel structures and components, machinery and equipment used in the field of marine, river, urban and industrial use.

SPECIFICATIONS

Density (approx.), kg/dm^3	1,4
Recommended thickness of the dry/wet layer, μm	55/85
drying time (20°C): to degree 1 (from dust), min	15
to degree 3 (dry to the touch), min	25
Theoretical consumption for a dry coating 55 μm thick, lkg/m^2	0,1
solids content (± 2), % vol.	68
solids content (± 2), % weight	72
VOC content in a ready-to-use product, g/l	440
Recommended number of layers	1-2

APPLICATION METHOD

Before applying, the primer-enamel FARBACOAT PROFI 63 should be thoroughly mixed.

Application method:

- airless spraying: nozzle ⌀ 0.38-0.53 mm; pressure 10-17 MPa;
- brush;
- pneumatic spraying: nozzle ⌀ 1.8-2.5 mm (in this case it is necessary to dilute to a viscosity

COATING TYPE
matte

COLORS
gray, black, brown, red

WARRANTY SHELF LIFE
12 months from the date of manufacture for components I and II; stored in closed factory packaging at a temperature of 5-35 °C.

RECOMMENDATIONS FOR USE

The surface - the cleaner the surface on which the mixture is applied, the more resistant the coating will be.

Coatings applied directly to steel surfaces that have been sandblasted to a minimum degree of purification Sa 2½ according to ISO 8501 or 2 according to GOST9.402, have the highest chemical and mechanical resistance.
The surface prepared for coating should be dry, free from salt, grease, dust and other contaminants.

Application conditions:
- surface temperature above the dew point at 3°C (avoid condensation);
- excellent ventilation.

Overlap interval: not less than 1 hour. This time applies only to the recommended thickness of coatings that dry in conditions of good ventilation. The time of application of subsequent layers depends on the temperature, ventilation conditions, the number of layers and the thickness of the coating.

Subsequent painting: alkyd enamel Farbacoat Profi 65, alkyd primer-enamel Farbacoat Profi 60.

Use with caution.
Packages contain appropriate safety signs that must be observed.

DILUENT
solvent, nefras, white spirit 0 - 20% vol.

IMPORTANT!
The product is designed for professional industrial use. Information about the safe use of the product is found in the Safety Data Sheet for the coating.

ENAMEL

FARBACOAT PROFI 65

Modified alkyd enamel of universal application. It forms a glossy coating, has a high adhesion to the base, elasticity, as well as resistance to weathering and temperature changes.

RECOMMENDATIONS FOR USE

For painting:

- structures used in the field of marine, river, urban and industrial use;
- technological equipment, machines, mechanisms;
- mining equipment;
- automotive and agricultural equipment for various purposes;
- residential equipment (sanitary equipment, fittings, etc.);
- balustrades, fences, railings, decorative steel elements.

SPECIFICATIONS

Density (approx.), kg/dm^3	1,1
Recommended thickness of the dry/wet layer, μm	35/70
drying time (20°C): to degree 1 (from dust), min	20
to degree 3 (dry to the touch), min	40
Theoretical consumption for a dry coating 35 μm thick, lkg/m^2	0,08
solids content (± 2), % vol.	50
solids content (± 2), % weight	55
VOC content in a ready-to-use product, g/l	450
Recommended number of layers	1-2

APPLICATION METHOD

Before applying, the enamel FARBACOAT PROFI 65 should be thoroughly mixed.

Application method:

- airless spraying: nozzle ⌀ 0.38-0.48 mm; pressure 10-17 MPa;
- brush;
- pneumatic spraying: nozzle ⌀ 1.7-1.9 mm (after dilution to a viscosity of 35-40 s, viscometer VZ-246, nozzle 4 mm).

APPLICATION

Surface preparation - primer Farbacoat Profi 63, primer-enamel Farbacoat Profi 60.

Application conditions:

- surface temperature above the dew point at 3°C (avoid condensation);
- excellent ventilation.

COATING TYPE
gloss

COLORS
Available in the RAL color palette or according to customer samples.

DILUENT
solvent, nephras, white spirit 0-20% of the volume

WARRANTY SHELF LIFE
12 months from the date of manufacture for components I and II; stored in closed factory packaging at a temperature of 5-35 °C

IMPORTANT!
The product is designed for professional industrial use. Information about the safe use of the product is found in the Safety Data Sheet for the coating.

STEEL PIPES AND FITTINGS

LINED WITH ABRASIVE-RESISTANT AND CORROSION-RESISTANT COATINGS

Pipes and fittings lined with abrasive-resistant and corrosion-resistant coatings Polyglass Corrocoat (UK).

The lining material is a modified vinyl-acrylic coating of natural curing with a filler of modified glass wool and is used where high resistance to chemicals, abrasives, as well as high temperatures are required. The method of application is based on the action of centrifugal forces (centrifugation). Connection of pipes is made by means of flanges. Maximum operating temperature - plus 110 °C in submersible environments, plus 175°C in non-submersible environments.

Lined pipelines are suitable for a large number of different chemical environments with pH from 0 to 13 are not exposed to demineralized water at temperatures up to 90°C, resist the effects of most solvents, are used in aggressive atmospheric conditions and splash zones (watering).

For the production of pipes and fittings lined with Polyglass coating the following is used:

- electric welded steel pipes according to GOST 10704;
- seamless hot-deformed steel pipes according to GOST 8732;
- elbows according to GOST 17375, GOST 24950;
- tees according to GOST 17375;
- transitions according to GOST 17378;
- flanges according to GOST 12820, GOST 12822, GOST 12815.

At the request of the consumer, pipes of other sizes and with other flanges are manufactured. The maximum length of the pipe is 5500 mm, the minimum length is 300 mm (limited by the possibility of flanking).

» Extremely low transmittance Polyglass is combined with excellent resistance to abrasive wear and cathodic corrosion.

The model range of the pipes, lined with Polyglass:

Outer diameter, mm	Weight of 1 m of pipes, including lining, kg, with wall thickness, mm													
	2,5	3	3,5	4	4,5	5	5,5	6	7	8	9	10	11	12
	Pipes steel seamless hot-rolled lined Polyglass VE													
50	3,27	3,82	4,34	4,86	5,36	5,86								
54		4,14	4,72	5,28	5,83	6,38								
57		4,39	5,00	5,60	6,20	6,77								
63,5		4,92	5,61	6,29	6,97	7,62								
68		5,28	6,03	6,77	7,50	8,21								
70		5,45	6,22	6,98	7,73	8,48								
73		5,69	6,50	7,30	8,09	8,87								
76		5,93	6,78	7,62	8,45	9,26								
83			7,44	8,36	9,27	10,18	11,06							
89			8,01	9,01	9,99	10,96	11,92							
95			8,57	9,64	10,69	11,75	12,78							
102			9,22	10,38	11,53	12,66	13,78							
108				11,02	12,24	13,44	14,64	15,82						
114				11,65	12,95	14,23	15,50	16,75						
121				12,40	13,78	15,14	16,50	17,85						
127				13,03	14,49	15,93	17,36	18,77						
133				13,68	15,20	16,71	18,21	19,71						
140					16,03	17,63	19,22	20,80	23,91					
146					16,74	18,42	20,08	21,73	25,00					
152					17,45	19,21	20,94	22,66	26,07					
159					18,29	20,12	21,94	23,75	27,34					
168						21,30	23,23	25,15	28,96	32,72				
180						22,87	24,95	27,02	31,13	35,17				
194						24,70	26,95	29,20	33,64	38,05				
203								30,59	35,27	39,88	44,46			
219								33,08	38,15	43,16	48,13			
245									42,84	48,49	54,10	59,65		
273									47,88	54,22	60,53	66,77		
299										59,55	66,49	73,38	80,22	
325										64,87	72,46	79,98	87,47	
351										70,20	78,42	86,60	94,71	
377								57,89	66,85	75,75	84,39	93,21	101,97	110,69
402											90,13	99,55	108,94	118,27
426									75,70	85,82	95,64	105,65	115,63	125,55
530						68,66	75,06	81,45	94,18	106,87	119,50	132,09	144,62	157,12
630									112,20	127,35	142,45	157,50	172,51	187,46
720									128,42	145,78	163,11	180,38	197,60	214,77
820									146,43	166,26	186,05	205,79	245,12	245,12
920									164,44	186,75	209,00	231,21	253,36	275,47
1020										207,23	231,95	256,62	281,25	305,82
1120										227,71	254,90	282,03	309,13	336,16
1220											277,85	307,45	337,00	366,51
1420												358,29	392,77	427,21

In agreement with the customer, it is possible to manufacture any other lined pipes in accordance with GOST 8732, GOST 10705.

The capacity of the pipe lining line is up to 1,000 meters per month. The production of pipes and fittings, lined with Polyglass is produced under the control of the manufacturer of the coating (Corrocoat Ltd. Britain).

ANTI-CORROSION PROTECTION

OF NON-STANDARD AND CAPACITIVE EQUIPMENT

PASSATSTAL, LLC carries out the following types of works on anti-corrosion protection:

- Anti-corrosion protection of capacitive equipment;
- Restoration and anti-corrosion protection of operated capacitive equipment;

Competently selected and executed corrosion protection is aimed at preserving and maintaining equipment operability in the course of its operation, thereby significantly reducing the cost of maintaining capacitive process equipment.

PASSATSTAL, LLC performs a complex of works on restoration of anti-corrosion protection of process tanks under conditions of high chemical, mechanical and thermal loads, storage tanks for corrosive liquids using industrial coatings of their own production, as well as coatings from leading European manufacturers that are partners of our company.

PIPELINE RENOVATION

Replacing the process pipeline is an expensive undertaking. If corrosion has just begun its destructive process, the pipeline can be restored.

The pipeline renovation process includes:

- Inspection of pipelines;
- Flushing of pipelines;
- Assessment of damage in the pipeline;
- Repair of pipelines;
- Replacement of pipelines;
- Lining of damaged pipelines;
- Replacing a damaged piece of pipeline and other work.

PASSATSTAL, LLC uses various methods for renovating process pipelines, using various materials and technologies.

PASSATSTAL

PASSATSTAL, LLC

Metyavichi roadway, 5B–1, Soligorsk district
223710, Republic of Belarus

Tel./Fax: +375 (44) 760 4444, +375 (174) 32 96 02, +375 (174) 32 96 03
email: stal@passat-group.by

passatstal.by