

PRODUCT DESCRIPTION

Two-pack, solvent free, high build polyurethane coating

FEATURE

Application:

- with dry film thickness up to 3 mm in one layer in the field or factory condition;
- temperature vary from -5 to +50°C.

Provide:

- very short drying and curing time;
- Volatile Organic Compound – 0 g/l.

RECOMMENDED TO USE

Steel and concrete structures:

- operating temperature up to 60°C;
- in protective systems with environmental corrosivity classes C2-C4, C5 and CX (ISO-12944-2/2018);
- for structures immersed in fresh, sea or brackish water penetrating to soil compatible with cathodic protection as well (Im1; Im2; Im3 and Im4 - ISO-12944-2 / 2018);

COMPATIBLE COATINGS

Depending on the operating conditions the material can be used with different types of coatings.

- Two-component epoxy coatings (2pack EP) of Welesgard.
- Two-component polyurethane coatings (2pack PUR) of Welesgard.

(For details please contact the Welesgard Technical Sales Support).

TECHNICAL DATA

Appearance	
Color:	Grey, Dark Yellow and Black
Appearance:	Semi-gloss coating
Material properties	
Volume solids:	100 ± 2%
Density of the mixture:	1.27 g/cm ³
VOC value:	0 g/l
Temperature resistance:	60°C
Adhesion to steel in the temperature range of 23°C to Tmax=50°C:	≥8 MPa
Adhesion after keeping in water for 1000 hours at the temperature Tmax=+60°C:	≥5 MPa
Service life expectancy *:	30 years

Note: * Service life expectancy depends to a considerable extent on the accuracy of compliance with the technology in the process of surface preparation and coat application, as well as on the peculiarities of coat operation conditions.

SURFACE PREPARATION

Surface type	Minimum	Recommended
Surface profile	Ry5 (75–120 μm) (ISO 8503-1)	Ry5 (75-120 μm) (ISO 8503-1)
Primed and previously painted surfaces	P St3; P Ma ISO 8501-2, ISO 12944-4	P Sa2½; P Ma ISO 8501-2½, ISO 12944-4
Steel surfaces	Sa 2 (ISO 8501-1)	Sa 2½ (ISO 8501-1)
Concrete Surfaces	SSPC-SP 13/NACE No. 6	SSPC-SP 13/NACE No. 6

AMBIENT CONDITIONS

Plural component airless application:

Ambient air temperature:	from -5 to +50°C
Surface temperature:	from -5 to +50°C
Paint Material temperature*:	
Component "A":	+40°C
Component "B" not less than:	+15°C
Relative humidity, below:	85%
Dew Point	at least 3°C higher than steel temperature

Note:

* Built-in heater for the base material component shall ensure heating upon application of component A to the temperature +50°C.

The surface should be dry and clean. The surface temperature should be min 3°C above the dew point of the air.

THICKNESS & THEORETICAL SPREADING RATE

Standard Grade	Min.	Med.	Max.
Dry Film Thickness:	500 µm	1500 µm	3000 µm
Wet Film Thickness:	500 µm	1500 µm	3000 µm
Spreading Rate:	2,0 m ² /l	0.67 m ² /l	0.33 m ² /l

Note: Practical coverage depends on the application conditions, structure to be painted, roughness of the surface and application method.

DRYING TIME

At temperature 23°C:

(Dry Film Thickness 1500 µ)	23°C
Gel time	120 sec.
Dry to touch	30 min.
Min. recoating interval	120 min.
Full curing	7 d

Note: Drying times and polymerization depend from the relative humidity, temperature, ventilation conditions and the thickness of the film.

(For details please contact the Welesgard Technical Sales Support).

APPLICATION DATA

Mixing ratio: 3:1

Resin	3 parts by volume
Curing Agent	1 part by volume

Plural component airless spray application:

Should be applied by plural component airless spray unit using proportioning pump capable to supply a volume mixing ratio of 3:1.

Thinning:

Thinning is not allowed.

Cleaner:

Mixer should have a safety valve and additional inlet for flushing with thinner, and for washing off equipment from mixed components when work is completed.

Use the cleaner WG-Welethinner EP.

When spraying of materials is stopped, wash mixer, whip hose with the thinner within 5-8 sec. Otherwise, whip hose and sprayer will get clogged with material.

APPLICATION METHODS

Plural component airless spray application unit with a proportioning pump capable to supply a volume mixing ratio of 3:1 and built-in heater is recommended only.

Heated hose supplying components from the pump to the mixer shall be heat-insulated to keep the temperature of components. Hose pipe of component "A" shall have inner diameter 3/8", and hose pipe of component "B" shall have inner diameter 1/4".

Do not use whip hose longer than 5 meters after static mixer.

PACKAGING

	Volume (liters)	Size of containers (liters)
Component. A	200	200
Component. B	200	200

STORAGE & SHELF LIFE

The product must be stored in original sealed containers. The storage conditions are to keep the containers in a dry, well ventilated space away from source of heat and ignition.

Storage temperature:	from 5 to 30°C
Component "A"	2 year
Component "B"	1 year

Note: After lasting storage primer shall be stirred thoroughly until its precipitation is spread over the suspension homogeneously. Precipitation in primer does not change its properties or worsen its quality.

After the expiration date has passed, it is necessary to check the quality of the paint material.

SAFETY

Use with adequate ventilation. Do not inhale aerosol. Avoid contact with skin. After contact with skin, wash immediately with detergent, soap and water. In case of contact with eyes, rinse immediately with water and seek medical advice immediately.

For detailed information on the health and safety protection for use of this product see Safety Data Sheet (SDS).

IMPORTANT NOTE

The above-mentioned information is given according to our laboratory tests and practical application experience. The manufacturer takes into consideration the fact that the material can be used out of control; the manufacturer cannot give guarantees except of the material quality.

The manufacturer has the right to improve the product and change the above-mentioned data without preliminary notification.