

PRODUCT DESCRIPTION FEATURE

Two-pack, solvent free, ultra-high build epoxy coating. VOC free coating.

Application:

- up to 85°C of surface temperature;
- up to 1500 microns in one layer;
- by plural feed hot airless spray equipment or by brush, roller as well.

Provide:

- fast dry and backfill times;
- high abrasion and impact resistant coating;
- high abrasion resistance for drilling applications;
- up to 95°C wet temperature resistance;
- excellent adhesion with epoxy-based powder coating (FBE);
- compatibility with cathodic protection.

RECOMMENDED TO USE

Steel surfaces:

- as a single layer coating to prevent corrosion under insulation;
- to protect internal and external surfaces of the main and station pipelines, assembly welds in pipelines;
- as a consumable protective coating for the guide drill and road pipe;
- to restore or maintenance existing piping coating;
- for repair of epoxy powder coating (FBE);
- to protect movable racks, saturations and other parts during production with an operating temperature of wet heating up to 95 ° C;
- for structures with environmental corrosivity classes C3, C4, C5 and CX (ISO-12944-2/2018) and 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).

Could be used with:

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

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

COMPATIBLE COATINGS

TECHNICAL DATA

Appearance	
Color:	Grey
Appearance:	Semi-gloss coating
Material properties	
Volume solids:	100 ± 2%
Density of the mixture:	1.43 g/cm ³
VOC value:	0 g/l
Temperature resistance:	95°C
Adhesion (ASTM D4541):	≥9 MPa
Impact resist., 25 °C:	6J
Taber abrasion, CS-17, 1Kg, 1000 cycles:	93 mg

SURFACE PREPARATION

Surface type	Minimum	Recommended
Surface profile	Ry5 (50–100 μm) (ISO 8503-1)	Ry5 (50-100 μm) (ISO 8503-1)
Primed and previously painted surfaces	Apply roughness to the surface. P Sa2; P Ma ISO 8501-2, ISO 12944-4;	Apply roughness to the surface. P Sa2½; P Ma ISO 8501-2, ISO 12944-4
Steel surfaces	Sa 2 (ISO 8501-1)	Sa 2½ (ISO 8501-1)

AMBIENT CONDITIONS

Plural component airless application:

Ambient air temperature:	from 10 to +55°C
Surface temperature:	from 10 to +85°C
Paint Material temperature*:	
Hand application Comp A&B	minimum +15 °C
Airless plural spray:	
Component "A":	from +60°C to +71°C
Component "B" not less than:	from +38°C to +43°C
Hose temperature	from +60°C to +65°C
Relative humidity, below:	85%
Dew Point	at least 3°C higher than steel temperature

Note: * Ambient temperature can be lower if the substrate is heated. Preheating may be done by either flame heating the surface with a propane torch or induction coil.

THICKNESS & THEORETICAL SPREADING RATE

Standard Grade	Min.	Med.	Max.
Dry Film Thickness:	500 µm	1000 µm	1500 µm
Wet Film Thickness:	500 µm	1000 µm	1500 µm
Spreading Rate:	2 m ² /l	1 m ² /l	0.67 m ² /l

Note: Recommended DFT:

- For FBE repairs – 700 – 800 µm;
- Bore pipes – 1000 – 1500 µm

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

DRYING TIME

(Dry Film Thickness 1000 µ)	10°C	23°C	35°C	45°C
Dry to touch	2 -3 h	20-30 min	15-20 min	12-15 min
Dried to backfill ²	6 -9 h	1-1.5 h	45-60 min	30-45 min
Recoating interval ³	5 h	2 h	1 h	0,5 h

¹ Drying times and polymerization depend from the relative humidity, temperature, ventilation conditions and the film thickness.

² A full or chemical cure may not be achieved by backfill time. For burying in wet soils or water the coating will need a full chemical cure.

³ **Recoating interval:** If a second or repair coats are required is necessary to made thumb nail cure test. The thumb nail test is defined by when one can no longer make a permanent indention in the coating using one's thumb nail. If the coating is soft, no surface preparation is required otherwise the surfaces shall be roughened by sweep blasting or 80 grit sandpaper.

⁴ In order to see if the coating has a full chemical cure the field test could be used. Solvent such as Xylene, MEK or Toluene can be rubbed on to the coating. If the gloss/sheen is removed the coating is not fully cured.

(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:

Plural feed hot airless spray unit should be used with a proportioning pump capable of a volume mixing ratio of 3:1.

For manual application: Stir resin (Part A) and curing agent (Part B) separately prior to mixing products together. Pour contents of Part B into Part A. (slow stirring) and then mix both components thoroughly until a uniform color with propeller stirrer.

Do not add additional curing agent Part B as this will affect the quality of the mixed coating. All kits are preliminary premeasured quantities of parts A and B.

Application shall take place immediately after mixing.

Before use, the temperature of the material packaging should be at least 3°C higher than the dew point.

Thinning:

Thinning is not allowed.

Cleaner:

WG-Welethinner EP.

Pot life:

Temperature:	Pot life
23°C	14 - 17 min.
40°C	7 - 8 min.

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 should be used as basic methods of application. Standard ancillary equipment should include heated hoppers, manifolds, and hoses, 2 ea. static mixers, 7.3 m max x 1/4" (0.64 cm) whip hose, and mastic gun with a 19 to 27 thou tip.

Part A should be heated to 60°C - 71°C and Part B heated to 38°C - 43°C. Hose bundle shall be set at 60°C - 65°C.

Applicators shall use a brush to smooth out any obvious sags or rough edges, valleys, or drips. Special attention shall be given to weld buttons and bottom surfaces.

To achieve the nominal film thickness in one application, an additional layer of **WG-Weleforce 95** should be applied using wet-on-wet technique to achieve the required wet film thickness.

Manual application using Brush & Roller:

Recommended for coating of pipeline applications such as weld joints, special pipe sections, fittings and fabrication. It is necessary to provide a nominal coating thickness.

For application use 100 mm wide brushes, applicator pads for small diameter pipe and/or 6mm nap rollers for large diameter applications.

Application shall take place immediately after mixing. Pour the product onto the surface, spread from up to down and around with a brush, nap roller or applicator pad beginning from the leading edge of the material to as far under the pipe as can be reached. Overlap the bands and onto the existing coating a minimum of 25mm.

DO NOT APPLY THE PRODUCT BY DIPPING THE BRUSH OR APPLICATOR INTO THE BUCKET.

Applicators shall use a brush to smooth out any obvious sags or rough edges, valleys, or drips. Special attention shall be given to weld buttons and bottom surfaces.

The coating thickness should be checked continuously by wet film gauge to achieve the minimum film thickness specified.

PACKAGING

	Volume (litres)	Size of containers (litres)
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 years
Component "B"	2 years

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.