WG-WELEFORCE PW

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Two-pack, solvent free, high build polyamine cure epoxy coating.

FEATURE

Application:

- at substrate temperature up to 55°C;
- in single layer with Dry Film Thickness (DFT) up to 600µm;
- by plural feed hot airless spray equipment;

Provide:

- resistant against bacterial attack;
- fast cure especially when applied to pre-heated substrate;
- wet temperature resistance up to 80°C in drinking water up to 60°C.

RECOMMENDED TO USE

Steel and concrete surfaces:

- solvent free coating for protection of pipes and structures used for potable water;
- for the long term protection of drinking water pipelines;
- storage and process tanks or vessels and other water retaining structures and related steelwork immersed or in contact with potable water.

COMPATIBLE COATINGS

Could be used with:

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

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

TECHNICAL DATA

Appearance	
Color:	Yellow
Appearance:	Glossy
Material properties	
Volume solids:	100 %
Density of the mixture:	1.52 g/cm^3
VOC value, max:	0 g/l
Wet heat resistance:	80°C
Wet heat resistance drinking water:	60°C

SURFACE PREPARATION

Surface type	Minimum	Recommended
Surface profile	Ry5 (50–100 µm) (ISO 8503-1)	Ry5 (50-100 µm) (ISO 8503-1)
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 10 to +55°C
Surface temperature:	from 10 to +55°C
Paint Material temperature:	
Hand application Comp A&B	minimum +15 °C
Airless plural spray:	
Component "A":	from +60°C to +70°C
Component "B":	from +60°C to +70°C
Hose temperature	from +60°C to +70°C
Relative humidity, below:	85%
Dew Point	at least 3°C higher than steel temperature

Note: Depending on temperature and humidity during application and cure some residual surface tack/bloom may become apparent. This is a perfectly normal occurrence and will disappear upon contact with water during normal flushing and/or disinfectant operations.

THICKNESS & THEORETICAL SPREADING RATE

Standard Grade	Min.	Med.	Max.
Dry Film Thickness:	300 µm	500 µm	600 µm
Wet Film Thickness:	300 µm	500 µm	600 µm
Spreading Rate:	3.3 m^2/l	2 m^2/l	1.7 m^2/l

Note: Maximum DFT when applied with brush 250 µm.

DRYING TIME

(Dry Film Thickness 600 µ)	10°C	25°C	40°C	50°C
Dry to touch	8 h	2 h	45 min	30 min
Dry to handle	12 h	3 h	1.5 h	1 h
Full cure	7 d	2 d	0,5 d	6 h

Note: Drying times and polymerization depend from the relative humidity, temperature, ventilation conditions and the film thickness.
- Is not recommended that coating dry and cure below 10°C.

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

APPLICATION DATA

Mixing ratio: 2 : 1

Resin	2 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 2:1.
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.
Before use, the temperature of the material packaging should be at least 3°C higher than the dew point.
The best results are achieved when material and substrate temperatures are above 15°C.

Thinning:
Thinning is not allowed.
Cleaner:
Clean equipment with Xylene, MEK, Toluene or combination of the three solvents.
Pot life:
Approximately 30 minutes at 20°C and 4 minutes at 60°C.

APPLICATION METHODS

Plural component airless spray application unit:
Both components should be pre-heated so that the temperature at the tip is between 35°C and 65°C dependent on the method of application and the equipment being used. Pump pressure and tip size will vary dependent on coat thickness and the shape of structure to be coated, however orifice size would normally be in the range of 17-23", with a tip pressure of up to 4000 psi.
Use with a proportioning pump capable to supply a volume mixing ratio of 2:1 and built-in heater should be used as basic methods of application.

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

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 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.

THE PRESENT TECHNICAL DATA SHEET REPLACES ALL PREVIOUS EDITIONS.