WG-WELEFORCE UA

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Is an ultra-high build, polyamide cure, two component epoxy coating.

FEATURE

- Specially designed for application in sea water environment.
- Has an excellent property for sea water splash zone maintenance and repair, corrosion and abrasive resistance.
- Will cure even after immersion in sea water.
- It has excellent cathodic disbondment protection and chemical resistance properties.
- Could be used as primer, mid coat or finish coat in atmospheric and immersed environments.

RECOMMENDED TO USE

The coating is designed for quick drying and minimum curing time, for structures used in extreme conditions. It is used to protect the riser racks of offshore oil platforms, especially in the zone of alternating wetting and sea water.

During repair, it can be applied in one layer on a minimally prepared surface.

COMPATIBLE COATINGS

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

Primer:

- Epoxy and zinc containing primers WELEFORCE series.
- WG-Weleforce UA

Top coat:

- Epoxy coating WELEFORCE series.
- Polyurethane coatings WG-Sulacover 2K series.

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

TECHNICAL DATA

Appearance	
Color:	Grey, Yellow, Light red
Appearance:	Semi-Gloss coating
	Material properties
Volume solids (mixed):	85% ± 2%
Density (at +20°C):	1.43 g/cm^3
VOC value:	210 g/l
Dry heat resistance (ASTM D2485):	120°C
Adhesion: (ASTM D4541)	>7 MPa
Taber abrasion, CS-17, 1Kg, 1000 cycles	55 mg

SURFACE PREPARATION

Steel Substrates

All surfaces should be visibly dry and clean. The surface should be examined and cleaned in accordance with ISO 8504.

Exposed to weather: Minimum grade of surface preparation is mechanical grinding to St3 (ISO 8501-1) or an abrasive blasted to Sa 2 or 2,5 grade (ISO 8501-1).

Exposed to immersion: Sand blasting to minimum Sa2½ (ISO 8501-1). All abrasive dust and debris must be blown or vacuum cleaned. Steel surfaces are to be coated within 4 hours after cleaning, while has not started rusting.

High Pressure Water Jetting could be used with minimum cleaning grade VIS4 WJ 2L.

Surface profile:

The surface profile must conform to "medium" or “coarse” according to ISO 8503-1 (50-80 µm).

AMBIENT CONDITIONS

Ambient air temperature:	from +5 to +50°C
Surface temperature:	from +5 to +50°C
Paint Material temperature:	from +10 to +20°C
Relative humidity, below:	85%
Dew Point	at least 3°C higher than steel temperature

THICKNESS & THEORETICAL SPREADING RATE

	Min.	Med.	Max.
Dry Film Thickness:	200 µm	500 µm	1000 µm
Wet Film Thickness:	235 µm	588 µm	1177 µm
Spreading Rate:	4.25 m^2/l	1.7 m^2/l	0.85 m^2/l

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

DRYING TIME

(Dry Film Thickness 500 µ)	5°C ≥85%RH	10°C ≥80%RH	23°C ≥50%RH
Dry to touch	10 h	5 h	2 h
Dried to handle	28 h	16 h	5 h
Min. overcoating interval (with epoxy)	14 h	7 h	3 h
Max. overcoating interval (with epoxy)	28 d	21 d	14 d
Min. overcoating interval (with polyurethane)	22 h	14 h	10 h
Max. overcoating interval (with polyurethane)	28 d	21 d	14 d
Full curing	28 d	21 d	7 d

[1] Drying times and polymerization depend from the relative humidity, temperature, ventilation conditions and the thickness of the film.
[2] If maximum recoat time is exceeded, it is necessary to make surface roughness with abrasive, rinse with clean water to remove dirt and allow drying.

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

APPLICATION DATA

Mixing ratio:

Resin	3 parts by volume
Curing Agent	1 part by volume

Stir resin and curing agent separately (slow stirring) and then mix both components thoroughly with propeller stirrer. Before use, packaging material and the temperature should not be less than 3 ° C higher than the dew point.

Add thinner only after both components have been thoroughly mixed and stir the mixture.

Thinning:

Add up to 5% by volume of thinner **WG-Welethinner EP** when thinning is needed.

Note:

[1] Adding a thinner will increase the drying time.
[2] In the case of using thinner other than recommended, the manufacturer not takes responsibility for any possible reduction in the quality of the coating!

Cleaner:

WG-Welethinner EP

Pot life:

Temperature:	Pot life
10°C	2 h.
23°C	60 min.
40°C	30 min.

APPLICATION METHODS

Airless spray application is recommended. For other spraying methods, viscosity adjustment may be necessary.

Airless application recommendations:

Pressure	25 MPa
Nozzle orifice	0,021-0,027″
Spray angle	Depended on object
Filter	To provide filter cleanliness. Filter Size – 30 mesh (595 µm).

Brush:
Recommended for touch-up, stripe coating and small areas only. It is necessary to provide a nominal coating thickness.

Roller:
Could be used for repair or minor touch-up work.
Do not use roller for application of priming coat.

PACKAGING

	Volume (litres)	Size of containers (litres)
Comp. A	15	20
Comp. B	5	5

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

SAFETY

Use with adequate ventilation. Do not inhale aerosol. Avoid contact with skin. After contact with skin, wash immediately with detergent, soap and water. Eyes rinse with water immediately and call a doctor.

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.