WG-WELEFORCE PRIMER

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Two-component polyamide cured fast drying epoxy primer.

FEATURE

- Provides barrier and cathodic protection and prevents corrosion under the paint film.
- The paint provides the opportunity to extended recoating times.
- It meets with the Swedish standard SIS 18 52 05 for two-component paints.
- The product is a part of a complete system which meets the requirements of IMO FTPC being a material with low flame-spread characteristics and not producing excessive quantities of smoke and toxic products at elevated temperatures

RECOMMENDED TO USE

Recommended to use as a primer in epoxy systems on:

- environment classes C2-C4 and C5-I/C5-M on blast cleaned steel surfaces (ISO-12944-2);
- suitable also for zinc-, aluminum and stone based substrates;
- san also be over coated with polyurethane paints.

COMPATIBLE COATINGS

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

Primer:

- WG-WELEFORCE PRIMER
- WG-WELEFORCE ZINC

Top coat:

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

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

TECHNICAL DATA

Appearance	
Color:	Red, grey, beige, black and offwhite*
Appearance:	Matt coating
	Material properties
Volume solids (mixed):	53% ± 2%
Total mass of solids:	980 g/l
VOC value:	420 g/l

Note: *white color contains zinc phosphate

SURFACE PREPARATION

All solid contamination that could prevent adhesion should be removed from the old surfaces. Remove salts and other water soluble contamination by wet cleaning with brush, high pressure-, steam- or alkali cleaning. Remove grease and oils by alkali-, emulsion- or solvent cleaning (ISO 8504-3, ISO 12944-4). The surfaces should be rinsed carefully with fresh water after cleaning. Old, painted surfaces, in which maximum overcoating interval has expired, additional roughening with suitable method is recommended.

Steel surfaces:

Blast cleaning to min Sa 2½ (ISO 8501-1, ISO 8504-2.

Surface profile:

The surface profile must conform to "fine" or "medium" according to ISO 8503-1 (30-75 microns Ry5).

Shop-primed surfaces:

Damaged or corroded surfaces should be blast cleaned to a minimum of Sa 2½. (ISO 8501-2, ISO 12944-4).

Aluminum surfaces:

Remove grease, anodizing residues and other contaminants. Sand-sweeping before painting improves adhesion.

When exposed to immersion sweep blast cleaning to Sa 2½ is required.

Zinc surfaces:

Remove grease, zinc salts and other impurities. Sand sweeping before painting improves adhesion.

AMBIENT CONDITIONS

Ambient air temperature:	from +10 to +50°C
Surface temperature:	from +10 to +50°C
Paint Material temperature:	+10 °C
Relative humidity, below:	80%
Dew Point	at least 3°C higher than steel temperature

THICKNESS & THEORETICAL SPREADING RATE

	Min.	Max.
Dry Film Thickness:	50 µm	100 µm
Wet Film Thickness:	95 µm	190 µm
Spreading Rate:	10,5 m^2/l	5,3 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 70 µ)	Standard Comp. B		S-Comp. B	
	10°C	23°C	10°C	23°C
Dry to touch	2 h	30 min	30 min	15 min
Dried to handle	10 h	4 h	4 h	1 h
Min. recoating interval (with epoxy)	10 h	3 h	6 h	2 h
Min. recoating interval (with polyurethane)	12 h	4 h	8 h	3 h
Min. recoating interval for immersion	24 h	16 h	24 h	16 h
Full curing	12 d	7 d	12 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: 4:1

Resin	4 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:

If is necessary could be add thinner WT-011, WT-012 (slow) no more than 10% by volume.

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:

WT- 011

Pot life:

- Standard Comp. B: approx. 7 h after mixing
- S-Comp. B: approx. 3 h after mixing

APPLICATION METHODS

Airless spray application is recommended.

Airless application recommendations:

Pressure	17-20 MPa
Nozzle orifice	0,013-0,018''
Spray angle	Depended on object
Filter	60 mesh (250 microns) To ensure that filters are clean

Conventional spray & Roller

It is not recommended

Brush:

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

PACKAGING

	Volume (litres)	Size of containers (litres)
Comp. A	8 / 16	10 / 20
Comp. B	2 / 4	2 / 4

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"	3 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.