

PRODUCT DESCRIPTION

Single pack moisture curing solvent based polyurethane intermediate coating.

FEATURE

- Unique paint material compounded with micaceous iron oxide (MIO).
- Does not contain coal tar and may have light colors that facilitate inspection of internal tank surfaces.
- Could be applied at high relative humidity, subzero temperatures and without restriction on dew point.
- Has no restriction on the maximum recoating interval application.
- Subzero application - cures down to -18°C.
- Could be used as a primer for nonferrous metal surfaces, stainless and galvanized steel and concrete surfaces.

RECOMMENDED TO USE

Recommended for long-term protection (up to 25 years) of steel surfaces exposed to conditions of medium, high and very high atmospheric corrosion categories (C3, C4, C5-I and C5-M - ISO-12944-2), and immersion in water or sea water (Im1 and Im2 - ISO-12944-2) the underwater area, alternating wetting and splash areas.

Designed for application on the primers as a thick-film intermediate coating, both for new steel structures and for repairs of existing coatings.

COMPATIBLE COATINGS

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

Primer:

- WG-Ferrogalvanic SP,
- WG-Ferrogalvanic
- WG-Welestone
- WG-Weleflex Sealer.

Topcoat:

- Welesgard one component moisture cured polyurethane coatings series.
- Two-component polyurethane coatings Sulacover 2K series.

For details, please contact Welesgard Technical Sales Support.

TECHNICAL DATA

Appearance	
Color:	Beige; Grey
Appearance:	Matt
Material properties	
Volume solids:	64±2 %
Density (at +20°C):	1.71 ± 0.05 g/cm ³
VOC value:	< 260g/l
Dry heat resistance (ASTM D2485) prolonged exposure	145°C
short-term exposure	175°C

SURFACE PREPARATION

Preliminary surface preparation:

All surfaces must be prepared and primed. Solid contamination that could prevent adhesion should be removed from the 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). After cleaning with detergents, rinse thoroughly with water.

Aluminium, galvanized and nonferrous metal, stainless steel:

The surface could be cleaned as it mention above, but addition roughness made by sand-papering or sweep blasting will increase coating adhesion to surface.

Pre-existing coatings:

Existing coating should be examined for adhesion and integrity. A test application on a small area could be done according to ISO 4627-81 or a similar standard so compatibility of coatings can be determined.

Concrete:

Surface should be prepared according to SSPCSP13/NACE N 6 standard recommendations. Prior application of WG-Weleflex coating, the penetrating primer WG-Weleflex Sealer should be applied to the concrete surfaces.

AMBIENT CONDITIONS

Air temperature:	from -18°C to +55°C
Surface temperature:	from -18°C to +55°C
Paint Material temperature:	+15°C
Relative humidity:*	30 - 99%
Dew Point:	Not limited surface is dry to touch

Note:

- Do not apply coating during rain or snow, or if precipitation is expected before the applied coating becomes dry to touch.

*At relative humidity levels below 30%, WG-Welefast Activator is recommended. WG-Welefast Activator can extend the RH application range to 5 - 99%.

THICKNESS & THEORETICAL SPREADING RATE

	Min.	Recommend	Max.
Dry Film Thickness:	80 µm	120 µm	200 µm
Wet Film Thickness:	125 µm	187.5 µm	312.5 µm
Spreading Rate:	8 m ² /l	5.3 m ² /l	3.2 m ² /l

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

DRYING TIME

For DFT of 100 µm	-5 °C ≥70%RH	10 °C ≥70%RH	25 °C ≥70%RH	40 °C ≥70%RH
Dry to touch	6.3 h	3 h	1.5 h	0.5 h
Dried to handle	24 h	9.5 h	3.5 h	1.5 h
Dry for service	28 d	14 d	7 d	3 d
Dry to recoat with 1 K MCC, min	24 h	9.5 h	3.5 h	1.5 h
Dry to recoat with 2 K PU, min	96 h*	36 h*	12 h*	4 h*

Note:

- As the relative humidity of the air decreases, the curing time of the coating increases.
- There is no maximum overcoating interval.
- WG-Welefast Activator may shorten drying time of the coating.
- *Recoat interval for 2 K PU can be shortened when using WG-Welefast Activator.

APPLICATION DATA**Stirring:**

It's a single pack material, which shall be stirred thoroughly before application with mechanical mixer in order to achieve its fully homogeneous condition. Before opening and stirring the temperature of material must be at least 3°C above dew point.

Thinning:

The addition of thinner is usually not necessary. If necessary **WG-Welethinner** or **WG-Welethinner CC** can be added up to 10% to the volume.

WG-Welethinner CC should be used at temperatures lower than +5°C.

WG-Welethinner should be used at temperatures from 0 to +55°C.

APPLICATION METHODS

Note: If other than recommended thinners are used the manufacturer is not responsible for deterioration of coating quality.

Cleaning:

After work all equipment shall be cleaned with the thinner WG-Welethinner or WG-Welethinner CC. In case the above-mentioned thinner are not available the following solution can be used: xylene; MEK; xylene and MEK mixed 1:1 solution.

Airless spray is the main method of application. As alternative the conventional spray method of applications are suitable as well.

Airless application recommendations:

Pressure	17-20 MPa
Nozzle orifice	0,013-0,021"
Spray angle	Depended on painting structure
Filter	To provide filter cleanliness. Filter Size - 60 mesh (250µm).

Brush:

Recommended for stripe coat application or minor repair touch-up only.

Roller:

Prohibited to use roller for application of priming coat. Roller could be used to build up the dry film thickness.

Note: In case the application gets interrupted (e.g. bad weather condition) or is slow, pour 100 - 200 ml of thinner on top and close the can tightly. This will prevent diffusion of moisture into the paint.

PACKAGING

WG-Ferrogalvanic	Volume (liters)	Size of containers (liters)
	10/12	10/12

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/or ignition.

Storage temperature:	from 5°C to 30°C
Shelf Life	12 months

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

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. 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.