WG-WELESTONE

TECHNICAL DATA SHEET

welesgard

PRODUCT DESCRIPTION

One-component, moisture-cure polyurethane primer/sealer coat with aluminium and micaceous iron oxide (MIO) pigments.

FEATURE

Application:

- at subzero temperatures down to -18°C;
- at high relative humidity up to 99%;
- with no dew point restrictions;
- with no restriction on the maximum recoating interval;
- to minimum surface preparation to grade St2 (ISO 8501-1);
- as a sealer coat for non-ferrous metals and galvanized surfaces.

Provides:

- high adhesion, anticorrosion and barrier properties due to aluminum and micaceous iron oxide (MIO) pigments.

RECOMMENDED TO USE

Steel and concrete surfaces:

- for structures in medium, high, very high and extreme atmospheric corrosivity categories (C3, C4, C5 and CX - ISO-12944-2 / 2018).

Non-ferrous metals:

- as an adhesive or protective layer.

COMPATIBLE COATINGS

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

- Single pack, moisture cured polyurethane coatings (1pack PUR) of Welesgard.
- Two-component epoxy (2pack EP) coatings of Welesgard.
- Two-component polyurethane (2pack PUR) coatings of Welesgard.

For details, please contact Welesgard Technical Sales Support.

TECHNICAL DATA

Appearance	
Color:	Aluminium
Appearance:	Matt
Material properties	
Volume solids:	67 ± 2 %
Density (at +20 °C):	1.20 ± 0.05 g/cm^3
VOC value:	<280 g/l
Dry heat resistance (ASTM D2485) prolonged exposure short-term exposure	 145 °C 175 °C
Impact resistance (ASTM 2794):	>5 J.

SURFACE PREPARATION

Surface type	Minimum	Recommended
Surface profile	Ry5 (30–75 мкм) (ISO 8503-1)	Ry5 (30–75 мкм) (ISO 8503-1)
Steel surfaces	St 2 (ISO 8501-1)	Sa 2½ (ISO 8501-1)
Surfaces of non-ferrous metals and stainless steel	Clean with alkaline solution, rinse with water. (SSPC-SP 1)	Light surface roughness ISO 8501-2, ISO 12944-4
Galvanized surfaces	Clean with alkaline solution, rinse with water. (SSPC-SP 1)	Light surface roughness ISO 8501-2, ISO 12944-4

AMBIENT CONDITIONS

Air temperature:	from -18 to +55 °C
Surface temperature:	from -18 to +55 °C
Relative humidity:*	30 – 99 %
Dew Point:	Not limited. Surface to be 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 a relative humidity below 30%, it is recommended to use the Welesgard Activator.
For details, please contact Welesgard Technical Sales Support.

THICKNESS & THEORETICAL SPREADING RATE

	Min.	Middle	Max.
Dry Film Thickness:	80 µm	100 µm	120 µm
Wet Film Thickness:	120 µm	150 µm	179 µm
Spreading Rate:	8.4 m^2/l	6.7 m^2/l	5.58 m^2/l

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

DRYING TIME

For DFT of 120 µm	-5°C	0 °C	5 °C	10 °C	25 °C	40 °C
Dry to touch	12 h	10 h	7 h	3 h	1h 30m	1 h
Recoat with itself or 1pack PUR, min / Dried to handle	24 h	20 h	16 h	12 h	7 h	3 h
Cure for service	-	-	-	14 d	8 d	4 d

Note:
- As the relative humidity of the air decreases, the curing time of the coating increases.
- There is no maximum overcoating interval.
- Welesgard Activator may shorter drying time of the coating.
- Drying and curing time determined at controlled temperature and relative humidity (RH) 60 - 80%.
For details, please contact Welesgard Technical Sales Support.

APPLICATION DATA

Stirring:
It is a single pack ready to use material. Prior to use, it must be thoroughly stirred with a low speed mixer, avoiding air entrapment. Constant stirring is not required.
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.
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.
For details, please contact Welesgard Technical Sales Support.

APPLICATION METHODS

Spray application:
Airless spray is the main method of application. For other spraying methods, viscosity correction may be required.
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.

PACKAGING

Volume (liters)	Size of containers (liters)
10	10

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 to 30 °C**
Shelf Life	18 months

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.