Technical Data
Muki Z WB-14 FW

Jotun Protects Property

Product description
Muki Z WB-14 FW is a two pack, high solid, self curing inorganic water borne medium zinc silicate shopprimer. Designed to utilize optimum productivity in connection with advanced welding technology (MIG/MAG/G-FCAW) giving reduced weld defects/backburning. Muki Z WB-14 FW is excellent in corrosion protection of steel during normal storage and fabrication. And reduces exposure to fumes during welding and cutting compared with other zinc shopprimers.

Recommended use
To be used as a preconstruction primer on blast-cleaned steel surfaces in automatic shop-priming plants to protect steel during transport, storage and production.

Film thickness and spreading rate

	Minimum	Maximum	Typical
Film thickness, dry (µm)	15	25	20
Film thickness, wet (µm)	25	40	30
Theoretical spreading rate (m^2/l)	41	25	31

Comments
Film thickness measured on a smooth test panel.

Physical properties

Colour	Grey
Solids (vol %)*	62 ± 2
Flash point	Non-Flammable
Gloss	Flat
Water resistance	Very good
Abrasion resistance	Excellent
Solvent resistance	Excellent
Chemical resistance	Very good at pH 6-10

*Measured according to ISO 3233:1998 (E)

VOC: 0 g/ltr (Actual, according to ISO 11890-1)

Surface preparation

All surfaces should be clean, dry and free from contamination. The surface should be assessed and treated in accordance with ISO 8504.

Bare steel
Cleanliness: Blast cleaning to Sa 2½ (ISO 8501-1:2007). Roughness: using abrasives suitable to achieve grade Fine to Medium S/G (30-85 µm, Ry5) (ISO 8503-2)

Other surfaces
The coating may be used on other substrates. Please contact your local Jotun office for more information.

Condition during application

The temperature of the substrate should be minimum at least 3°C above the dew point of the air, temperature and relative humidity measured in the vicinity of the substrate. Relative humidity in the air should not exceed 85% prior to application. Recommended steel temperature: 30-40°C.

Application methods

Spray	Use a specially designed conventional spray/HVLP.

Application data

Mixing ratio (volume)	6,9:2,4
Mixing	The two components, 6,9 litre liquid resin and 2,4 litre dry zinc dust pigments are supplied in separate containers and must be mixed as follows: add the zinc dust pigment Comp. B slowly to liquid Comp. A, stirring continuously. Pigment must be added to liquid; not liquid into pigment. Stir until uniformly mixed, then strain through a 60 mesh strainer. Continuous agitation during application is recommended.
Pot life (23°C)	6 hours.
Thinner/Cleaner	Water , 60 g/l maximum.
Guiding data airless spray	
Air Cap	
Filter	
Guiding data conventional spray	
Pressure at nozzle	0.3-0.5 MPa (3-5 kp/cm², 42-70 psi).
Air Gap	9-11
Nozzle tip	0.043" - 0.072" (1.08 - 1.8 mm)
Spray angle	40-80º
Filter	Check to ensure that filters are clean.
Note	Proper routines for cleaning and maintenance of the priming unit are necessary to achieve high productivity and uniform quality. Before starting work and after finishing with Muki Z WB-14 FW it is recommended to circulate water through the entire spraying equipment for some minutes.

Drying time

Drying times are generally related to air circulation, temperature, film thickness and number of coats, and will be affected correspondingly. The figures given in the table are typical with:

* Good ventilation (Outdoor exposure or free circulation of air)
* Typical film thickness
* One coat on top of inert substrate

Substrate temperature	**23°C**	**40°C**
Surface dry	1 min	0.5 min
Through dry	1 min	0.5 min
Cured	2 h	1 h
Dry to recoat, minimum [1 & 2]		

1 The surface should be free of zinc salts and other contamination prior to application.

2 **Overcoating:** Surface pH shall be less than 8 compared to the fixed scale by using Universal indicator paper pH 0-14. Normal weathering conditions (outdoor storage) will normally bring down pH to acceptable limit. Indoor dry storage : pre-treatment will be necessary.
Under water: Muki Z WB-14 FW can be used also in submerged areas provided pH < 8 and that surface density of salts is less than 50 mg/m². The surface density of salts should be measured by using the Bresle Method (ISO 8502-6 and ISO 8502-9).

The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

Typical paint system

Muki Z WB-14 FW **1 x 20 µm (Dry Film Thickness measured on a smooth test panel).**

Undamaged shopprimer can be overcoated with a choice of systems based on epoxy, vinyl or chlorinated polymers.

Other systems may be specified, depending on area of use

Storage

Storage condition are to keep the containers in a dry, cool, well ventilated space and away from source of heat and ignition. Containers must be kept tightly closed. The component A must be protected from freezing. SHELF LIFE: 6 months at 23°C for Comp. A. , 1 years for comp. B, subject to re-inspection thereafter. Higher temperatures during storage may reduce the shelf life and may lead to gelling in the can.

Handling

Handle with care. Stir well before use. Continuous stirring during application will prevent the heavy zinc pigment from settling.

Packing size

9,3 litre unit: 6,9 litres Comp. A (silicate solution) in a 10 litre can and 2,4 litres Comp. B (zinc powder) in a 10 litre container.

Health and safety

Please observe the precautionary notices displayed on the container. Use under well ventilated conditions. Do not breathe or inhale mist. Avoid skin contact. Spillage on the skin should immediately be removed with suitable cleanser, soap and water. Eyes should be well flushed with water and medical attention sought immediately.

For detailed information on the health and safety hazards and precautions for use of this product, we refer to the Material Safety Data Sheet.

DISCLAIMER

The information in this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. However, as the product can be used under conditions beyond our control, we can only guarantee the quality of the product itself. We also reserve the right to change the given data without notice. Minor product variations may be implemented in order to comply with local requirements.
If there is any inconsistency in the text the English (UK) version will prevail.

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ISSUED 26 NOVEMBER 2010 BY JOTUN
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