

Technical Data

Muki Z 2001



Product description

Muki Z 2001 is a two-pack, modified low zinc ethyl silicate shopprimer. Designed to utilize optimum productivity in connection with advanced welding technology (MIG/ MAG/G-FCAW) giving reduced weld defects/backburning. Muki Z 2001 is good in corrosion protection of steel during normal storage and fabrication, and reduces exposure to fumes during welding and cutting compared with medium to high 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.

For application on steel for water ballast tanks in accordance with PSPC (IMO Res. MSC 82/W), cleanliness must be: Dust - Min. rating 1, sizes 3,4,5 (ISO 8502-3:1993) and soluble salt - Maximum 50 mg/m² (ISO 8502-6 and- 9:1998).

Film thickness and spreading rate

	Minimum	Maximum
Film thickness, dry (µm)	15	20
Film thickness, wet (µm)	55	70
Theoretical spreading rate (m ² /l)	18,7	14

Comments

Dry film thickness measured on a smooth test panel.

Physical properties

Colour	Green, Grey, Red
Solids (vol %)*	28 ± 2
Flash point	14°C ± 2 (Setaflash)
VOC	600 gms/ltr UK-PG6/23(97). Appendix 3
Gloss	Flat
Water resistance	Very good
Abrasion resistance	Excellent
Solvent resistance	Excellent
Chemical resistance	Excellent within pH range 6-10.
Flexibility	Limited

*Measured according to ISO 3233:1998 (E)

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. Recommended steel temperature: 30-40°C.

Application methods

Spray Use airless spray or conventional spray
Brush Recommended for touch-up purposes.

Application data

Mixing ratio (volume)	10:6,75
Mixing	10 parts by volume Comp. A (Silicate solution) to be thoroughly mixed with 6,75 parts by volume Muki Z 2001, Comp. B (Zinc paste).
Pot life (23°C)	24 hours. (Reduced at higher temperatures).
Thinner/Cleaner	Jotun Thinner No. 4/25 (No. 4 - Fast Evaporation) - (No. 25 - Slow evaporation).
Guiding data airless spray	
Pressure at nozzle	5 - 7 MPa (50 - 70 kp/cm ² , 700 - 900 psi).
Nozzle tip	0.38 - 0.58 mm (0.015 - 0.023").
Spray angle	40 - 95°

Note	<p>* Proper routines for cleaning and maintenance of the priming unit are necessary to achieve high productivity and uniform quality. Before start of work and after finishing with Muki Z 2001 it is recommended to circulate Jotun Thinner No. 4 or No. 25 through the entire spraying equipment for some minutes. During application it is necessary to use a mechanical stirrer.</p> <p>* The Comp. B (Zinc paste) must be stirred continuously while the Comp. A (Silicate solution) is added.</p>
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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
- * Relative humidity at 80 %

Substrate temperature	23°C	40°C
Surface dry	1-3 min	20-40 sec
Through dry	3-5 min	1-2 min
Cured ¹	1 d	1 d
Dry to recoat, minimum ²	1 d	1 d
Dry to recoat, maximum ³		

