

Technical Data

MUKI Z 2001



Product description

Muki Z 2001 is a two-pack, modified low zinc ethyl silicate shopprimer designed to utilize extra high productivity in connection with advanced welding technology (MIG/ MAG/G-FCAW). Other pronounced features with Muki Z 2001 are the reduced health risk during welding and cutting and the reduction in weld defects.

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
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 \pm 2
Flash point	14°C \pm 2 (Setaflash)
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 8501-1:1988). 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 parts by volume Comp. A (Silicate solution) to be thoroughly mixed with 6,75 parts by volume 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/cm², 700 - 900 psi).
Nozzle tip 0.38 - 0.58 mm (0.015 - 0.023").
Spray angle 40 - 95°

Note * 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.

* The Comp. B (Zinc paste) must be stirred continuously while the Comp. A (Silicate solution) is added.

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		

1. Curing time to be verified by MEK-test (ASTM D 4752-87).
2. Recommended data given for recoating with coatings normally specified on top of shopprimers.
3. The substrate should be free from any zinc salts and other contamination prior to application of the subsequent coat.

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 2001 1 x 15 - 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 rubber resins.

Other systems may be specified, depending on area of use

Storage

The product must be stored below 25°C and in accordance with national regulations. Storage conditions 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.

Handling

SHELF LIFE: 6 months at room temperature for Comp. A. Handle with care. Stir well before Use. Continuous stirring during application will prevent the heavy zinc pigment from settling.

Packing size

20 litre unit: 10 litres Comp. A (silicate solution) in a 20 litre container and 6.75 litres Comp. B (Zinc paste) in a 10 litre container

Packing may vary from country to country according to local requirements.

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 is often used under conditions beyond our control, we cannot guarantee anything but the quality of the product itself. We reserve the right to change the given data without notice.

Footer - English

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