

# Technical Data

## BALTOFLAKE MULTI E



### Product description

Baltoflake Multi E is a styrene free glass flake reinforced polyester coating with wide film thickness range that gives long term corrosion protection. It can be applied both with ratio 1:1 two-component airless spray and ordinary one-component airless equipment.

### Recommended use

Steel structures in general and in particular items subject to extreme mechanical wear. May also be used for protection of aluminium and concrete (special designed systems).

### Film thickness and spreading rate

	Minimum	Maximum	Typical
Film thickness, dry ( $\mu\text{m}$ )	300	600	500
Film thickness, wet ( $\mu\text{m}$ )	300	610	510
Theoretical spreading rate ( $\text{m}^2/\text{l}$ )	3.3	1.63	2

### Physical properties

Colour	Limited range of colours.
Solids (vol %)*	98 $\pm$ 1
Flash point	53°C $\pm$ 2 (Setaflash)
Gloss	Semiflat
Gloss retention	Good
Water resistance	Excellent
Abrasion resistance	Excellent
Solvent resistance	Very good
Chemical resistance	Very good
Flexibility	Limited
Compatibility with cathodic protection	Very good

\*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

Blast cleaning to Sa 2½. (ISO 8501-1:1988). Roughness: using abrasives suitable to achieve a coarse surface of Grade Medium G (50-85 $\mu\text{m}$ , Ry5) (ISO 8503-2).

#### Coated surfaces

Approved on top of Baltoflake Holding Primer

#### 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 5°C (10° when using 1-comp. spray) and at least 3°C above the dew point of the air, temperature and relative humidity measured in the vicinity of the substrate. Good ventilation is usually required in confined areas to ensure proper drying. The coating should not be exposed to oil, chemicals or mechanical stress until fully cured.

## Application methods

- Spray** Preferably 1:1 2-comp. airless spray. Other types of 2-component equipment can be used. Application with 1-comp. ordinary airless spray is also possible.
- Brush** Recommended for stripe coating and small areas, care must be taken to achieve the specified dry film thickness.

## Application data

### Mixing ratio (volume)

1:1-2-component airless spray:  
Norpol accelerator 9802P/S (1% Co) is added to one paint container and Norpol peroxide No. 1 to the other.  
1-component airless spray: Both Norpol accelerator 9802P/S (1% Co) and Norpol peroxide No. 1 is added to the same container.  
For correct addition, see tables below. Warning: Accelerator and peroxide must never be mixed directly together.

### Pot life (23°C)

10-55 minutes (Reduced at higher temperatures).

### Thinner/Cleaner

If needed max 5% vinyl toluene. For cleaning: Acetone or Jotun Thinner No 17.

### Guiding data airless spray

#### Pressure at nozzle

15 - 25 MPa (150-250 kp/cm<sup>2</sup>, 2100-4000 psi.)

#### Ratio/Capacity:

>45:1, min. 12 l per minute. Slow moving piston.

#### Nozzle tip

0.69 - 1.09 mm (0.027 - 0.043").

#### Spray angle

40-80°, best 60°.

#### Filter

To be removed.

#### Note

For further details please see separate "Working Manual".

Approved alternatives to Norpol catalyst No 1 can be used. Contact Jotun Paints, Technical Service Department.

## 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

### Using 2-comp. airless spray

Substrate temperature	5°C	10°C	23°C	40°C
Surface dry	3 h	2.5 h	1 h	1 h
Through dry	3 h	2.5 h	1 h	1 h
Cured	3 d	2 d	1/2 d	1/6 d
Dry to recoat, minimum	3 h	2.5 h	1 h	1 h
Dry to recoat, maximum <sup>1</sup>	14 d	14 d	14 d	14 d

### Using 1-comp. airless spray

Substrate temperature	10°C	23°C	40°C
Surface dry	3 h	2 h	2 h
Through dry	3 h	2 h	2 h
Cured	3 d	2 d	1 d
Dry to recoat, minimum	3 h	2 h	2 h
Dry to recoat, maximum <sup>1</sup>	14 d	14 d	14 d

- 1 The surface should be free from chalking and contamination prior to application. If the maximum dry to recoat time is exceeded, please contact Jotun Paints for advice.

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

**Baltoflake Multi E**                      **1 x 500 µm**                      **(Dry Film Thickness)**

For immersed areas:

**Baltoflake Multi E**                      **2 x 600 µm**                      **(Dry Film Thickness)**

Number of coats and dry film thickness will vary, depending on corrosion class and lifetime request. Please contact Jotun Technical Support at nearest Jotun office for advice.

**Other systems may be specified, depending on area of use**

### MIXING TABLES:

**When using 2-component spray, the temperature of the paint should not be lower than 15°C. Mechanical agitation for for 1 min. is necessary to secure proper mixing of the added components into the paint:**

#### 1:1-2-component airless spray.

Mark one paint container **A** and the other **B**.

Steel temperature	Addition to container A Norpol accelerator 9802P/S		Addition to container B Norpol peroxide No. 1	
	Volume %	ml. to 16 ltr.	Volum %	ml to 16 ltr.
5-10°C	4,6	735	4,2	670
10-35°C	4,6	735	2,1	335

**After addition of Norpol Peroxide No 1, the content of container B should be used within 8**

hours.

## 2-component airless spray wich is equipped with peroxide injection pump:

Steel temperature	Addition of Norpol accelerator 9802P/S		Addition of Norpol peroxide No 1
	Volume %	ml. to 16 ltr.	Volum %
5-10°C	2,3	370	2,1
10-35°C	2,3	370	1,0

## 1-component airless spray:

Steel temperature	Addition of Norpol accelerator 9802P/S		Addition of Norpol peroxide No 1	
	Volume %	ml. to 16 ltr.	Volum %	ml to 16 ltr.
10-15°C	2,3	370	1,0	160
15-20°C	1,15	185	1,0	160
20-25°C	0,8	130	1,0	160
25-35°C	0,6	95	1,0	160

The temperature of the paint should never be more than 5°C higher than the steel temperature. The accelerator should be mixed properly into the paint before Norpol Peroxide No 1 is added.

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## 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.

SHELF LIFE: 6 months, subject to re-inspection thereafter. Shelf life very much depends on teperature. Lower temperatures (if possible below freezing point) will lengthen the shelf life considerably, while high temperature may lead to gelling in the thin.

## Handling

Handle Norpol Peroxide with care. Avoid that it comes in contact with combustibile materiales. Accelerator and peroxide must never be mixed directly together.

## Packing size

16 L. (20 kg)

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.*

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