

Jotatemp 1000 Ceramic

Product description

This is a two component titanium catalyzed inorganic ceramic copolymer. It is resistant to low temperatures down to -196 °C and high temperatures up to 1000 °C continuously, where substrates allow. Can be used as primer or finish coat in atmospheric environments. Suitable for properly prepared carbon steel, stainless steel and ceramic substrates. On carbon steel and stainless steel substrates it can be used up to 650 °C continuously and 750 °C intermittent. It can be applied on hot substrates up to 150 °C.

Typical use

Protective:

Designed as a heat resistant coating. Suitable for insulated and non insulated surfaces. Can be used in combination with an inorganic zinc silicate coating as primer, providing heat resistance up to 400 °C and long corrosion protection. For shorter periods, such a combined system can handle peak temperatures up to 540 °C.

Colours

dark grey, aluminium (close to RAL 9006)

Product data

Property	Test/Standard	Description
Solids by volume	ISO 3233	75 ± 2 %
Gloss level (GU 60 °)	ISO 2813	matt (0-35)
Flash point	ISO 3679 Method 1	26 °C
Density	calculated	1,8 kg/l
VOC-US/Hong Kong	US EPA method 24 (tested)	362 g/l
VOC-EU	IED (2010/75/EU) (calculated)	329 g/l

The provided data is typical for factory produced products, subject to slight variation depending on colour.

All data is valid for mixed paint.

Gloss description: According to Jotun Performance Coatings' definition.

Film thickness per coat

Typical recommended specification range

Dry film thickness	100 - 150	µm
Wet film thickness	130 - 200	µm
Theoretical spreading rate	7,5 - 5	m ² /l

Surface preparation

To secure lasting adhesion to the subsequent product all surfaces shall be clean, dry and free from any contamination.

Surface preparation summary table

Substrate	Surface preparation	
	Minimum	Recommended
Carbon steel	St 2 (ISO 8501-1)	Sa 2½ (ISO 8501-1)
Stainless steel	Cleanliness and surface profile corresponding to St 2, Fine G (ISO 8503-2)	Cleanliness and surface profile corresponding to Sa 2½, Fine G (ISO 8503-2)
Ceramic substrates	The surface shall be clean and dry	The surface shall be clean and dry
Coated surfaces	Clean, dry and undamaged compatible coating (ISO 12944-4 6.1)	Clean, dry and undamaged compatible coating (ISO 12944-4 6.1)

Application

Application methods

The product can be applied by

- Spray: Use airless spray.
- Brush: Recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

Product mixing ratio (by volume)

Jotatemp 1000 Ceramic Comp A	140 part(s)
Jotatemp 1000 Ceramic Comp B	1 part(s)

Thinner/Cleaning solvent

Thinner: Jotun Thinner No. 7 / Jotun Thinner No. 21

For substrate temperatures below 100 °C use Jotun Thinner No. 7.

For substrate temperatures between 100 °C and 150 °C use Jotun Thinner No. 21.

Guiding data for airless spray

Nozzle tip (inch/1000):	17-23
Pressure at nozzle (minimum):	150 bar/2100 psi

Drying and Curing time

Substrate temperature	10 °C	15 °C	23 °C	40 °C
Surface (touch) dry	5.5 h	3 h	2.5 h	1.5 h
Walk-on-dry	24 h	18 h	6 h	3.5 h
Dry to over coat, minimum	24 h	18 h	6 h	3.5 h

Drying and curing times are determined under controlled temperatures and relative humidity below 85 %, and at average of the DFT range for the product.

Surface (touch) dry: The state of drying when slight pressure with a finger does not leave an imprint or reveal tackiness.

Walk-on-dry: Minimum time before the coating can tolerate normal foot traffic without permanent marks, imprints or other physical damage.

Dry to over coat, minimum: The shortest time allowed before the next coat can be applied.

Induction time and Pot life

Paint temperature	23 °C
Pot life	6 h

Heat resistance

	Temperature
	Continuous
Dry, atmospheric	1000 °C

Steel substrates:
Continuous: 650 °C Peak: 750 °C

The temperatures listed relate to retention of protective properties. Aesthetic properties may suffer at these temperatures.

Product compatibility

Depending on the actual exposure of the coating system, various primers and topcoats can be used in combination with this product. Some examples are shown below. Contact Jotun for specific system recommendation.

Previous coat: zinc silicate, itself
Subsequent coat: silicone, itself

Packaging (typical)

Volume	Size of containers
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	(litres)	(litres)
Jotatemp 1000 Ceramic Comp A	4.5	5
Jotatemp 1000 Ceramic Comp B	0.03	0.25

The volume stated is for factory made colours. Note that local variants in pack size and filled volumes can vary due to local regulations.

Storage

The product must be stored in accordance with national regulations. Keep the containers in a dry, cool, well ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care.

Storage temperature not to exceed 40 °C.

Shelf life at 23 °C

Jotatemp 1000 Ceramic Comp A	12 month(s)
Jotatemp 1000 Ceramic Comp B	12 month(s)

In some markets commercial shelf life can be dictated shorter by local legislation. The above is minimum shelf life, thereafter the paint quality is subject to re-inspection.

Caution

This product is for professional use only. The applicators and operators shall be trained, experienced and have the capability and equipment to mix/stir and apply the coatings correctly and according to Jotun's technical documentation. Applicators and operators shall use appropriate personal protection equipment when using this product. This guideline is given based on the current knowledge of the product. Any suggested deviation to suit the site conditions shall be forwarded to the responsible Jotun representative for approval before commencing the work.

Health and safety

Please observe the precautionary notices displayed on the container. Use under well ventilated conditions. Do not inhale spray 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.

Colour variation

When applicable, products primarily meant for use as primers or antifoulings may have slight colour variations from batch to batch. Such products may fade and chalk when exposed to sunlight and weathering.

Disclaimer

Technical Data Sheet
Jotatemp 1000 Ceramic

