

## Jotachar 1709

### Product description

This is a two component solvent free amine cured epoxy intumescent coating. Specially designed to provide passive fire protection for steel in hydrocarbon pool fires for different types of structures and equipment. No additional reinforcing mesh is required. To be used as mid coat as part of a complete system in atmospheric environments. Suitable on approved primers on carbon steel, hot dipped galvanised steel and stainless steel substrates.

### Typical use

Typically used in the oil, gas and energy industries. Suitable for all onshore environments. In line with all epoxy intumescent technologies, the product is suitable for use on pipe work, vessels or equipment operating up to 80 °C. Should it be necessary to install on substrates operating at higher temperatures, please contact your local Jotun office for more information.

### Approvals and certificates

ANSI/UL 1709 tested and Listed by Underwriters Laboratories (UL) for fire durations from 60 minutes to 240 minutes

Additional certificates and approvals may be available on request.

### Colours

grey

### Product data

Property	Test/Standard	Description
Solids by volume	ISO 3233	100 %
Flash point	ISO 3679 Method 1	100 °C
VOC-US/Hong Kong	US EPA method 24 (tested)	0 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.

Applied density (ISO 1183:1987 Method A): 1.0 g/cm<sup>3</sup>

### Film thickness per coat

#### Typical recommended specification range

Dry film thickness is in the range of 5.39 mm to 21.45 mm dependent upon the fire case and project specific requirements.

Typical first coat thickness achievable is 5.5 mm.

Subsequent coats of up to 10 mm can be applied in a continuous application process, typically carried out after 60 minutes dependent on ambient conditions.

Film build is dependent upon steel configuration, geometry, ambient conditions, pump type and set up as well as primer used.

Absolute maximum DFT is the thickness at which the system can be applied without sagging or slumping.

## 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
Coated surfaces	Clean, dry and undamaged compatible coating (ISO 12944-5 6.1)	Clean, dry and undamaged compatible coating (ISO 12944-5 6.1)

## Application

### Application methods

The product can be applied by

Spray: Use two component heated plural spray unit or modified airless spray (with heating equipment). Refer to the Application Guide (AG) for additional information.

Note: All pumps used for the application of this product must be certified by Jotun.

Trowel: Refer to the Application Guide (AG) for additional information.

### Product mixing ratio (by weight)

Individual components must have been stored for minimum 12 hours at 25 to 30 °C (77 to 86 °F). Stir/mix thoroughly with a power agitator before application.

Jotachar 1709 Comp A 1 part(s)

Jotachar 1709 Comp B 1 part(s)

### Thinner/Cleaning solvent

Thinner: Jotun Thinner No. 29

Thinning is typically 2-3 % by volume for modified airless spray and manual application.

Thinning max.: 5 %

Cleaning solvent: Jotun Thinner No. 7

### Guiding data for airless spray

Nozzle tip (inch/1000):	31-41
Pressure at nozzle (minimum):	200 bar/2900 psi

## Drying and Curing time

Substrate temperature	5 °C	15 °C	23 °C	40 °C
Surface (touch) dry	6 h	3 h	1 h	1 h
Walk-on-dry	24 h	12 h	6 h	3 h
Dry to over coat, minimum	6 h	3 h	2 h	1 h
Dried/cured for service	24 h	12 h	6 h	3 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.

Dried/cured for service: Minimum time before the coating can be permanently exposed to the intended environment/medium.

## Induction time and Pot life

Paint temperature	15 °C	23 °C
Pot life	75 min	40 min

## 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 epoxy, inorganic zinc silicate, epoxy, epoxy mastic

Subsequent coat: crosslinked acrylic, polyurethane, polysiloxane, epoxy

For the list of approved primers, please consult Jotun.

## Packaging (typical)

	Weight	Size of containers (litres)
Jotachar 1709 Comp A	20 kg / 10 kg / 2.5 kg	20 / 10

Jotachar 1709 Comp B

20 kg / 10 kg /  
2.5 kg

20 / 10 /  
5

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

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## 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 35 °C.

## Shelf life at 23 °C

Jotachar 1709 Comp A

12 month(s)

Jotachar 1709 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.

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## 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.

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## 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.

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## 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.

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## Disclaimer

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom)

# Technical Data Sheet

## Jotachar 1709



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version will prevail.

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