

## Chemclear

### Product description

This is a vinyl ester coating. It is a chemical resistant and fast curing sealer coating, to be used as primer as a part of a complete system. Suitable in combination with glass fibre matts. Can be used as primer in atmospheric and immersed environments. Suitable for properly prepared carbon steel and concrete surfaces.

### Typical use

Protective:

Specially designed to be used as a lining in storage tanks in combination with glass fibre mats. Designed to be used as a sealer on carbon steel and concrete substrates for Chemflake products.

### Colours

clear (yellowish shade)

### Product data

Property	Test/Standard	Description
Solids by volume	calculated	96 ± 2 %
Gloss level (GU 60 °)	ISO 2813	gloss (70-85)
Flash point	ISO 3679 Method 1	34 °C
Density	calculated	1 kg/l

Region	Regulation	Test Standard	VOC Value
US	CARB(SCM)2020 / SCAQMD rule 1113	Calculated	7 g/l
Hong Kong	Air Pollution Control (VOC) Regulation	Calculated	7 g/l
EU	European Paint Directive 2004/42/CE	Calculated	7 g/l
EU IED	Industrial Emission Directive 2010/75/EU	Calculated	7 g/l
Korea	Korea Clean Air Conservation Act	Calculated	7 g/l

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

Gloss description: According to Jotun Performance Coatings' definition.

## Film thickness per coat

### Typical recommended specification range

Dry film thickness	150 - 300	µm
Wet film thickness	160 - 315	µm
Theoretical spreading rate	6.4 - 3.2	m <sup>2</sup> /l

Practical consumption on concrete : 0.15 - 0.3 l/m<sup>2</sup>

All vinyl ester and polyester resin systems are subject to some shrinkage during the curing process. This results in a practical spreading rate lower than the theoretically calculated. The shrinkage depends on actual dry film thickness applied and conditions during application.

## Surface preparation

### Surface preparation summary table

Substrate	Surface preparation	
	Minimum	Recommended
Concrete	Minimum 4 weeks curing. Moisture content maximum 5 %. Prepare the surface by means of enclosed blast shot or diamond grinding and other appropriate means to abrade the surrounding concrete and to remove laitance.	Minimum 4 weeks curing. Moisture content maximum 5 %. Dry abrasive blast cleaning to SSPC-SP 13/NACE No. 6.
Carbon steel	Sa 2½ (ISO 8501-1) with a surface profile Medium to Coarse G (ISO 8503-2)	Sa 2½ (ISO 8501-1) with a surface profile Medium to Coarse G (ISO 8503-2)

## Application

### Application methods

The product can be applied by

Spray:	Standard airless spray may be used. Dedicated two component airless spray is an option.
Brush:	Recommended.
Roller:	Recommended.

### Mixing ratio table - Additives

The steel temperature shall not be lower than the paint temperature and not more than 20 °C above the paint temperature.

Additive volumes (ml) in 16 litres product.

Due to local regulations, local variants in pack size and filled volume may exist. Note that the amount of additives must be adjusted accordingly.

Additive	Paint temperature	
	15-19 °C	20-24 °C
Jotun Peroxide 1, Norox KP-9 or Butanox M-50	400	400

### Thinner/Cleaning solvent

Thinner: Styrene

Thinning max.: 20 %

Thin if used as sealer. Thinning is not normally required. Consult the local representative for advice during application in extreme conditions. Do not thin more than allowed by local environmental legislation.

Cleaning solvent: Acetone / Jotun Thinner No. 17 / Jotun Thinner No. 23

When thinners are used as a cleaning solvent, the use must be in accordance with prevailing local regulations.

### Guiding data for airless spray

Nozzle tip (inch/1000): 19-23

Pressure at nozzle (minimum): 150 bar/2100 psi

### Drying and Curing time

Substrate temperature	15 °C	23 °C	40 °C
Surface (touch) dry	4 h	2 h	1 h
Walk-on-dry	4 h	2 h	1 h
Dry to over coat, minimum	4 h	2 h	1 h
Dry to over coat, maximum, immersed	1 d	1 d	1 d
Dried/cured for service	8 d	4 d	2 d

For maximum overcoating intervals, refer to the Application Guide (AG) for this product.

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 recommended shortest time before the next coat can be applied.

Dry to over coat, maximum, immersed: The longest 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.

---

<b>Paint temperature</b>	<b>23 °C</b>
--------------------------	--------------

---

Pot life	20 min
----------	--------

## Heat resistance

	Temperature	
	Continuous	Peak
Dry, atmospheric	140 °C	-
Immersed, sea water	85 °C	-

Note that the coating will be resistant to various immersion temperatures depending on the specific chemical and whether immersion is constant or intermittent. Heat resistance is influenced by the total coating system. If used as part of a system, ensure all coatings in the system have similar heat resistance.

## 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: vinyl ester

Subsequent coat: vinyl ester

## Packaging (typical)

	Volume (litres)	Size of containers (litres)
Chemclear	16	20

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, shaded, cool, well-ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care.

## Shelf life at 23 °C

Chemclear	4 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 and epoxy based products used as a finish coat may chalk when exposed to sunlight and weathering.

Colour and gloss retention on topcoats/finish coats may vary depending on type of colour, exposure environment such as temperature, UV intensity etc., application quality and generic type of paint. Contact your local Jotun office for further information.

## 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) version will prevail.