Solvalitt 600

Product description

This is a high solid, low VOC, one component physically drying silicone acrylic coating. It is heat resistant up to 600 °C. Can be used direct to properly prepared substrates, such as carbon steel, galvanised steel, stainless steel and aluminium, or overcoat on compatible primers in atmospheric environments.

Typical use

Designed as a heat resistant coating. Suitable for insulated and non insulated surfaces. Recommended as finish coat for insulated surfaces, in systems with suitable primers.

Other variants available

Solvalitt 600 Alu

Refer to separate TDS for each variant.

Colours

According to colour card.

Due to variations in the thermal stability of pigments, slight colour changes can occur when the coating is heated. Note that such a colour change will not affect the performance of the coating.

Product data

Property	Test/Standard	Description
Solids by volume	ISO 3233	55 ± 2 %
Gloss level (GU 60 °)	ISO 2813	matt (0-35)
Flash point	ISO 3679 Method 1	27 °C
Density	calculated	1.4 kg/l

Region	Regulation	Test Standard	VOC Value
Korea	Korea Clean Air Conservation Act	Calculated	400 g/l
China	GB 30981-2020 Limit of harmful substances of industrial protective coatings	GB/T 23985-2009 8.3	405 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.

Note: Heat resistant topcoats can be tinted in a range of colours. However, due to its pigmentation certain colours will appear less gloss and colour stable than others.

Film thickness per coat

Typical recommended specification range

Dry film thickness	20	-	50	µm
Wet film thickness	36	-	91	µm
Theoretical spreading rate	28	-	11	m²/l

Surface preparation

Surface preparation summary table

Substrate	Surface preparation	
	Minimum	Recommended
Carbon steel	Sa 2½ (ISO 8501-1)	Sa 2½ (ISO 8501-1)
Stainless steel	The surface shall be sweep blast-cleaned with the nozzle angle at 45-60° from perpendicular at reduced nozzle pressure to create a sharp and angular surface profile using approved nonmetallic abrasive media.	The surface shall be sweep blast-cleaned with the nozzle angle at 45-60° from perpendicular at reduced nozzle pressure to create a sharp and angular surface profile using approved nonmetallic abrasive media.
Aluminium	The surface shall be hand or machine abraded with non-metallic abrasives or bonded fibre machine or hand abrasive pads to impart a scratch pattern to the surface.	Dry abrasive blast cleaning to SSPC-SP 13/NACE No. 6.
Galvanised steel	The surface shall be clean, dry and appear with a rough and dull profile.	Sweep blast-cleaning using non-metallic abrasive leaving a clean, rough and even pattern.
Coated surfaces	Clean, dry and undamaged compatible coating	Clean, dry and undamaged compatible coating

Application

Application methods

The product can be applied by

Spray:	Use air spray or airless spray.
Brush:	Recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.
Roller:	May be used for small areas. Not recommended for first primer coat. Care must be taken to achieve the specified dry film thickness.

Product mixing

Single pack

Thinner/Cleaning solvent

Thinner: Jotun Thinner No. 7

Thinning is not recommended.

When thinners are used as a cleaning solvent, the use must be in accordance with prevailing local regulations. Cleaning solvents must comply with GB 38505-2020.

Guiding data for airless spray

Nozzle tip (inch/1000): 15-17

Pressure at nozzle (minimum): 150 bar/2175 psi

Drying and Curing time

Substrate temperature	5 °C	10 °C	23 °C	40 °C
Surface (touch) dry	1 h	45 min	30 min	15 min
Walk-on-dry	4 h	3 h	2 h	1.5 h
Dry to over coat, minimum	8 h	5 h	4 h	3 h

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.

As a heating resistant coating, Solvalitt 600 will develop to full mechanical properties after being properly heated or put into the correctly specified high temperature positions. This effect can however be overcome by heating the paint system to 200 °C for approx. 1 hour.

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.

Heat resistance

	Temperature	
	Continuous	Peak
Dry, atmospheric	600 °C	-

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:	epoxy, zinc silicate, silicone acrylic, multipolymeric matrix
Subsequent coat:	silicone acrylic

Packaging (typical)

	Volume (litres)	Size of containers (litres)
Solvalitt 600	5/20	5/20

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.

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Shelf life at 23 °C

Solvalitt 600	24 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.