JDTankpro 700

Product description

This is a two component polyamine cured novolac epoxy coating. Specially designed tank coating with excellent chemical resistance and a turn-around time of 5 days after carriage of methanol. Developed as a 3-coat system for optimum chemical resistance in atmospheric and immersed environments. Suitable for properly prepared carbon steel, galvanised steel and stainless steel substrates. It can be applied down to +5 °C surface temperature.

Typical use

Marine:

Specially designed as an internal tank coating for chemical tanks. This coating has excellent resistance to a wide range of products with very little chemical absorption making it highly suitable for frequent changes of cargo.

Colours

light grey, light red, white

Product date

Property	Test / Standard	Description
Solids by volume	ISO 3233	70±2%
Gloss level（GU60°）	ISO 2813	semi gloss（25-70）
Flash point	ISO 3679 Method 1	28℃
Density	calculated	1.6Kg/L
VOC-China	GB/T23985-2009(ISO11890-1)	298g/L

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

All data is valid for mixed paint.

Film thickness per coat

Typical recommended specification range

Dry film thickness	80μm - 150μm
Wet film thickness	115μm - 215μm
Theoretial spreading rate	0.18Kg/m^2 -0.34Kg/m^2

Maximum recommended film thickness is often exceeded in overlap zones and in difficult-to-spray areas. This product can be applied up to 50 % higher than maximum specified film thickness without loss of technical properties.

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	Sa 2½ (ISO 8501-1)	Sa 2½ (ISO 8501-1)
Stainless steel	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.	Abrasive blast cleaning to achieve a surface profile using non-metallic abrasive media which is suitable to achieve a sharp and angular surface profile.
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.

Optimum performance, including adhesion, corrosion protection, heat resistance and chemical resistance is achieved with recommended surface preparation.

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.

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 ratio (by weight)

JDTankpro 700	Comp A	6.4 part(s)
JDTankpro 700	Comp B	1 part(s)

Thinner/Cleaning solvent

Thinner: Jindun Thinner No. 103/ Jindun Thinner No. 123

Guiding date for airless spray

Nozzle tip (inch/1000):	17-21
Pressure at nozzle (minimum):	150 bar/2100 psi

Drying and Curing time

Substrate temperature	5℃	10℃	15℃	23℃	30℃	40℃
Surface (touch) dry	24h	16h	6h	4h	3h	2h
Walk-on-dry	36h	24h	10h	7h	4h	3h
Dry to over coat, minimum	36h	24h	20h	16h	14h	10h
Dried/cured for immersion	15d	7d	5d	4d	3d	2d
Dried/cured for service	30d	14d	10d	7d	4d	3d

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

Preconditioning (minimum three-month period after the carriage of first cargo) or hot cure is required to carry certain aggressive cargoes.

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.

Dried/cured for immersion: Minimum time before the coating can be permanently immersed in sea water.

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	5℃	10℃	15℃	**23℃**	**30℃**	**40℃**
Induction time	30min	25min	20min	15min	10min	5min
Pot life	4h	3h	3h	2h	1.5h	1h

Heat resistance

Temperature

	Continuous	Peak
Dry, atmospheric	140 ℃	150 ℃
Immersed, sea water	80 ℃	90 ℃
Immersed, crude oil	120 ℃	130 ℃

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 Jindun for specific system recommendation.

Previous coat: itself only

Subsequent coat: itself only

Packaging(typical)

	Weight (Kg)	Size of containers (litres)
JDTankpro 700 Comp A	22.4	20
JDTankpro 700 Comp B	3.5	4

The volume stated is for factory made colours.

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.

Shelf life at 23 °C

JDTankpro 700 Comp A 24 month(s)

JDTankpro 700 Comp B 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 Jindun'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 Jindun 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.

Disclaimer

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