JDLst5330

Product description

This is a two component polyamine cured epoxy mastic coating. It is a surface tolerant, high solids product. Specially designed for areas where optimum surface preparation is not possible or required. Can be used as primer, mid coat, finish coat or as single coat system in atmospheric environments. Suitable for properly prepared carbon steel and aged coating surfaces. It can be applied at sub zero surface temperatures.

Typical use

General:

Primarily designed for maintenance and repair. In immersed environments JDLst5330 Aluminium is suitable.

Marine:

Outside hulls, exterior and interior areas.

Protective:

Recommended for offshore environments, refineries, power plants, bridges, buildings, mining equipment and general structural steel.

Colours

grey, red, green, off-white, black

Product date

Property	Test / Standard	Description
STANDARD GRADE		
Solids by volume	ISO 3233	80±2%
Gloss level（GU60°）	ISO 2813	Semi gloss（30-70）
Flash point	ISO 3679 Method 1	35℃
Density	calculated	1.5Kg/L
VOC-China	GB/T23985-2009(ISO11890-1)	179g/L
WINTER GRADE		
Solids by volume	ISO 3233	72±2%
Gloss level （GU60°）	ISO 2813	Semi gloss（30-70）
Flash point	ISO 3679 Method 1	36℃
Density	calculated	1.5Kg/L
VOC-China	GB/T23985-2009(ISO11890-1)	238g/L

The provided data is typical for factory produced products, subject to slight variation depending on colour.
All data is valid for mixed paint.
Small colour variations may occur when changing between the two curing agents. If exposed to weathering without topcoat, the Wintergrade (WG) version will yellow at a faster rate than the same colour in Standard grade.
The VOC values refer to grey colour.

Film thickness per coat

Typical recommended specification range

STANDARD GRADE

Dry film thickness	75µm - 200µm
Wet film thickness	95µm - 250µm
Theoretial spreading rate	10.7m^2/L - 4 m^2/L

WINTER GRADE

Dry film thickness	75µm - 200µm
Wet film thickness	105µm - 280µm
Theoretial spreading rate	9.6m^2/L - 3.6 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) or SSPC SP-2	Sa 2½ (ISO 8501-1) or NACE No. 2 /SSPC SP-10
Shop primed steel	Clean, dry and undamaged shop primer (ISO 12944-4 5.4)	Sa 2 (ISO 8501-1)
Coated surfaces	Clean, dry and undamaged compatible coating	Clean, dry and undamaged compatible coating

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 volume)

STANDARD GRADE

JDLst5330	Comp A	7 part(s)
JDLst5330	STD Comp B	1 part(s)

WINTER GRADE

JDLst5330	Comp A	4 part(s)
JDLst5330	Wintergrade Comp B	1 part(s)

Independent on substrate temperature the minimum temperature of the mixed base and curing agent is 10 °C. Lower temperature may require additional thinner to reach correct application viscosity. Additional thinner gives lower sag resistance and slower curing. If addition of thinner is required, this shall be done after mixing of the two components.

Thinner / Cleaning solvent

Thinner: Jindun Thinner No. 103

Guiding date for airless spray

Nozzle tip (inch/1000):	19-25
Pressure at nozzle (minimum):	150 bar/2100 psi

Drying and Curing time

Substrate temperature	-5℃	0℃	5℃	10℃	23℃	40℃
STANDARD GRADE						
Surface (touch) dry				8h	4h	2h
Walk-on-dry				24h	10h	4h
Dry to over coat, minimum				24h	10h	4h
Dried/cured for service				14d	7d	2d
Substrate temperature	-5℃	0℃	5℃	10℃	23℃	40℃
WINTER GRADE						
Surface (touch) dry	24h	18h	12h	6h	2.5h	
Walk-on-dry	48h	26h	18h	12h	5h	
Dry to over coat, minimum	48h	26h	18h	12h	5h	
Dried/cured for service	21d	14d	7d	3d	2d	

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.

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	23℃
STANDARD GRADE	
Induction time	10min
Pot life	2h
WINTER GRADE	
Pot life	1h

Heat resistance

Temperature

	Continuous	Peak
Dry, atmospheric	120℃	-
Immersed, sea water	50℃	60℃

Peak temperature duration max. 1 hour.

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

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: epoxy shop primer, inorganic zinc silicate shop primer, zinc epoxy, epoxy, epoxy mastic, inorganic zinc silicate

Subsequent coat: polyurethane, polysiloxane, epoxy, acrylic, vinyl epoxy

Packaging(typical)

		Volume (litres)	Size of containers (litres)
JDLst5330	Comp A	16	20
JDLst5330	Standard Comp B	2.3	3
JDLst5330	Wintergrade Comp B	4	5

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

JDLst5330	Comp A	48	month(s)
JDLst5330	Standard Comp B	24	month(s)
JDLst5330	Wintergrade 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.