JDLst5331 GF

Product description

This is a two component polyamine cured epoxy mastic coating. It is a surface tolerant, abrasion resistant, high solids, high build product. It is reinforced with glass flakes for improved abrasion and scratch resistance.
Specially designed for areas where optimum surface preparation is not possible or required. Provides long lasting protection in environments with high corrosivity. Can be used as primer, mid coat, finish coat or as single coat system in atmospheric and immersed environments. Suitable for properly prepared carbon steel, galvanised steel, stainless steel, aluminium, concrete and a range of aged coating surfaces. It can be applied at sub zero surface temperatures.

Typical use

General:
Primarily designed for maintenance and repair. Specially suitable for surfaces exposed to considerable wear and tear such as high traffic areas.

Other variants available

JDLst5331
JDLst5331 Aluminium
Refer to separate TDS for each variant.

Colours

grey, red

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	1.4Kg/L
VOC-China	GB/T23985-2009(ISO11890-1)	230g/L
WINTER GRADE		
Solids by volume	ISO 3233	80±2%
Gloss level （GU60°）	ISO 2813	Semi gloss（30-70）

Flash point	ISO 3679 Method 1	36℃
Density	calculated	1.4Kg/L
VOC-China	GB/T23985-2009(ISO11890-1)	202g/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

STANDARD GRADE

Dry film thickness	200μm - 300μm
Wet film thickness	250μm - 375μm
Theoretial spreading rate	$4m^2/L$ - $2.7m^2/L$

WINTER GRADE

Dry film thickness	200μm - 300μm
Wet film thickness	250μm - 375μm
Theoretial spreading rate	$4m^2/L$ - $2.7m^2/L$

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
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.
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.	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.
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
Concrete	Low pressure water washing to a rough, clean, dry and laitance free surface.	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.

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)

STANDARD GRADE

JDLst5331GF Comp A 5.5 part(s)

JDLst5331 Standard Comp B 1 part(s)

WINTER GRADE

JDLst5331GF Comp A 5.5 part(s)

JDLst5331 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			20h	12h	4h	1.5h
Walk-on-dry			40h	20h	6h	3h
Dry to over coat, minimum			30h	10h	3h	1.5h
Dried/cured for service			28d	14d	7d	2d
Substrate temperature	-5℃	0℃	5℃	10℃	23℃	40℃
WINTER GRADE						
Surface (touch) dry	24h	18h	12h	8h	3.5h	
Walk-on-dry	72h	30h	20h	12h	4h	
Dry to over coat, minimum	54h	20h	10h	6h	2h	
Dried/cured for service	21d	14d	10d	5d	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.

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	
Pot life	2h
WINTER GRADE	
Pot life	45min

Heat resistance

Temperature

	Continuous	Peak
Dry, atmospheric	100℃	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)

	Weigt (Kg)	Size of containers (litres)
JDLst5331GF Comp A	20.9	20
JDLst5331 Standard Comp B	3.8	4
JDLst5331 Wintergrade Comp B	3.8	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

JDLst5331GF	Comp A	48	month(s)
JDLst5331	Standard Comp B	24	month(s)
JDLst5331	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.