

## Litamastic 180

### 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 subzero surface temperatures.

### Typical use

General: Primarily designed for maintenance and repair.

Marine: Outside hulls, exterior and interior areas. For submerged service is need to use Aluminium color of the product.

### Approvals and certificates

Food, Compliant with USA, FDA Title 21, Part 175.300 for dry solids

Grain, Newcastle Occupational Health

When used as part of an approved scheme, this material has the following certification:

- Low Flame Spread in accordance with EU Directive for Marine Equipment. Approved in accordance with parts 5 and 2 of Annex 1 of IMO 2010 FTP Code, or Parts 5 and 2 of Annex 1 of IMO FTPC when in compliance with IMO 2010 FTP Code Ch. 8.

Consult local Litum representative for details.

Additional certificates and approvals may be available on request.

### Colors

Grey, red, green, off-white, black, aluminium, aluminium red-toned

### Product data

#### Standard version

Solids by volume	80±2%
Gloss level (GU 60°) (ISO 2813)	Semi gloss (35-70)
Flash point (ISO 3679 Method 1)	35°C
Density	1.5±0.05 kg/l
Volatile organic compounds (VOC)	238 g/l

#### Winter grade version

Solids by volume	72±2%
Flash point (ISO 3679 Method 1)	31°C
Density	1.5±0.,05 kg/l
Volatile organic compounds (VOC)	278 g/l

The provided data is typical for factory-produced products, subject to slight variation depending on color. All data is valid for mixed paint. Gloss description is subject to Litum definition.

### Film thickness per coat

#### Typical recommended specification range

##### Standard version

Dry film thickness	75-200 µm
Wet film thickness	95-250 µm

Theoretical spreading range 10.7-4.0 m<sup>2</sup>/l

**Winter grade version**

Dry film thickness 75-200 µm

Wet film thickness 95-250 µm

Theoretical spreading range 9.6-3.6 m<sup>2</sup>/l

**Surface preparation**

To secure lasting adhesion to the subsequent product all surfaces shall be clean, dry and free from any contamination.

**Surface preparation table**

**Carbon steel**

<b>Minimum</b>	St 2 (ISO 8501-1)
<b>Recommended</b>	Sa 2½ (ISO 8501-1)

**Shop primed steel**

<b>Minimum</b>	Clean, dry and undamaged approved shop primer (ISO 12944-4 5.4).
<b>Recommended</b>	Sa 2 (ISO 8501-1).

**Coated surfaces**

<b>Minimum</b>	Clean, dry and undamaged compatible coating
<b>Recommended</b>	Clean, dry and undamaged compatible coating

**Application**

**Application methods**

**Spray:**  
Use air spray or airless spray.

**Brush:**  
Recommended for stripe coating and small areas. Please be careful to achieve the specified dry film thickness.

**Roller:**  
May be used for small areas but is not recommended for first primer coat. However, when using roller application care must be taken to apply sufficient material in order to achieve the specified dry film thickness.

**Mixing ratio**

**Standard version** 7:1 (by volume)

**Winter grade version** 4:1 (by volume)

**Thinner**

Litum Thinner N<sup>o</sup> 17

**Induction and pot life**

**Standard version**  
Induction 10 min (23°C)  
Pot life 2 hours (23°C)

**Winter grade version**  
Pot life 1 hour (23°C)

## Airless application

Nozzle tips range (inch/1000):	19-25
Pressure nozzle outlet (minimum):	150 bar/2100 psi

## Drying

Surface temperature	-5°C	0°C	5°C	10°C	23°C	40°C
<b>Standard version</b>						
Touch dry				8h	4h	2h
Handle (hard) dry				24h	10h	4h
Overcoat minimum				24h	10h	4h
Overcoat maximum (Immersed)			21d	18d	14d	14d
Overcoat by topcoats maximum (Atmospheric)			90d	90d	90d	60d
Service dry				14d	7d	2d
<b>Winter grade version</b>						
Touch dry	24h	18h	12h	6h	2,5h	
Handle (hard) dry	48h	26h	18h	12h	5h	
Overcoat minimum	48h	26h	18h	12h	5h	
Overcoat maximum (Immersed)	14d	10d	10d	10d	7d	7d
Overcoat by topcoats maximum (Atmospheric)	10d	10d	10d	10d	7d	5d
Service dry	21d	14d	7d	3d	2d	

Curing/drying time is increasing when coating applied at relative humidity (RH) below 85%, and at average of the DFT range for the product.

**Touch dry:** the state of drying when slight pressure with a finger does not leave an imprint or reveal tackiness.

**Handle (hard) dry:** minimum time before the coating can tolerate normal pressing without permanent marks or other physical damage.

**Overcoat minimum:** the recommended shortest time before the next coat application.

**Service dry:** minimum time before the coating can be constantly exposed to the intended environment.

## High temperature resistance

Dry, atmospheric	120°C (continuous)
Immersed, sea water	50°C (continuous)
Immersed, sea water	60°C (peak)

Duration of superior temperature limit is maximum 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.

## 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 Litum for specific system recommendation.

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

Next coat: polyurethane, epoxy, acrylic, vinyl epoxy

## Packing size

	Volume (L)	Container (L)
<b>Litamastic 180</b> comp. A	16	20
<b>Litamastic 80</b> comp. B	2.3	3
<b>Litamastic 80 Nord</b> comp. B	4	5

The volume stated is for factory made colors.

## Storage and shelf life at 23°C

Storage conditions are to keep the containers in a dry, cool, well-ventilated area and away from source of heat and ignition. Containers must be kept tightly closed. Handle with care.

<b>Litamastic 180</b> comp. A	48 months
<b>Litamastic 80</b> comp. B	48 months
<b>Litamastic 80 Nord</b> comp. B	36 months

The above is minimum shelf life, thereafter the paint quality is subject to re-inspection.

## Qualification, health and safety

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 for approval before commencing the work. Please observe the Litum'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 Litum representative precautionary notices displayed on the container. Use under well-ventilated conditions. Do not inhale spray mist. Avoid skin contact. Spillage on the skin should be immediately removed with suitable cleanser, soap and water. Eyes should be well flushed with water and medical attention sought immediately.

## Color variation

When applicable, products primarily meant for use as primers may have slight color variations from batch to batch. Such products and epoxy-based products used as a finish coat may chalk when exposed to sunlight and weathering. Color and gloss retention on topcoats/finish coats may vary depending on type of color, exposure environment such as temperature, UV intensity etc., application quality and generic type of paint. Contact your local Litum office for further information.

## Disclaimer

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