

Litaprime Express MIO

Description

This is a two-component amine cured epoxy coating. It is a fast drying, micaceous iron oxide (MIO) pigmented, high solids, high build product. Specially designed for new construction where short dry to handle and over coating times are required. Can be used as primer, mid coat, finish coat or as single coat system in atmospheric environments. Suitable for properly prepared carbon steel, aluminium, concrete and galvanized steel substrates. It can be applied at subzero surface temperatures.

Typical use

Suitable for structural steel and piping exposed in corrosively categories from C2 to C5 (ISO 12944-2). Recommended for offshore environments, refineries, power plants, bridges, buildings, mining equipment and general structural steel.

Other variants available: Litaprime Express, Litaprime Express F.

Refer to separate TDS for each variant.

Colors

Grey, red

Product data

Solids by volume	74±2%
Gloss level	Matt
Flash point (ISO 3679 Method 1)	32°C
Density	1,5±0,05 kg/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

Dry film thickness	75-250 µm
Wet film thickness	110-340 µm
Theoretical spreading range	9.9-3.0 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 table

Carbon steel

Minimum	St 3 (ISO 8501-1)
Recommended	Sa 2½ (ISO 8501-1)

Shop primed steel

Minimum	Clean, dry and undamaged approved shop primer (ISO 12944-4 5.4)
Recommended	Sweep blasted or alternatively blasted to Sa 2 (ISO 8501-1) of at least 70 % of the surface.

Aluminium

Minimum	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.
Recommended	Abrasive blast cleaning to achieve a surface profile using non-metallic abrasive media that is suitable to achieve a sharp and angular surface profile.

Galvanized steel

Minimum	The surface shall be clean, dry and appear with a rough and dull profile.
Recommended	Sweep blast-cleaning using nonmetallic abrasive leaving a clean, rough and even pattern.

Coated surfaces

Minimum	Clean, dry and undamaged compatible coating
Recommended	Clean, dry and undamaged compatible coating

Concrete

Minimum	Minimum 4 weeks curing. Moisture content maximum 4 %. Mechanically prepare the existing concrete surface by scabbling, needle gun, mechanical disc grinding.
Recommended	Minimum 4 weeks curing. Moisture content maximum 4%. 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.

Coated surfaces

Minimum	Clean, dry and undamaged compatible coating
Recommended	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.

Mixing ratio

4:1 (by volume)

Thinner

Litum Thinner Nº 17

Induction and pot life

Pot life 2 hours (23°C)

Airless application

Nozzle tips range (inch/1000): 17-23
Pressure nozzle outlet (minimum): 150 bar/2100 psi

Drying

Surface temperature	-5°C	0°C	5°C	10°C	23°C	40°C
Touch dry	16h	11h	4h	2h	1h	30min
Handle (hard) dry	38h	24h	10h	6h	3h	2h
Overcoat minimum	24h	14h	8h	4h	2h	1h
Service dry		21d	13d	8d	4d	3d

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

120°C (continuous)

140°C (peak – up to 1 hour)

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.

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

Next coat: acrylic, epoxy, polyurethane, polysiloxan

Packing size

	Volume (L)	Container (L)
Litaprime Express MIO comp. A	4/16	5/20
Litaprime Express comp. B	1/4	1/5

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.

Litaprime Express MIO comp. A	24 months
Litaprime Express comp. B	24 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 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 for approval before commencing the work.

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 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.