

Litatherm 250

Description

This is a two-component glass flake reinforced phenolic epoxy composite coating. Designed as a heat resistant coating and it is resistant to low temperatures down to -196°C and high temperatures up to 250°C on carbon steel. Suitable for insulated and non-insulated surfaces. Suitable for properly prepared carbon steel, stainless steel, alloyed steel (P91), galvanized steel and aluminium. It can be applied on hot substrates up to 150°C. Please refer to the application guide for more detailed information. This product may be used as a primer, mid coat or finish coat. It will offer proper corrosion protection at ambient conditions during construction and shutdown periods. The product passes the standard tests used for qualifying coatings preventing corrosion under insulation (CUI).

Typical use

Designed as corrosion protection for surfaces operating at elevated temperatures where extended protection against corrosion is desired. Particularly suited for use under insulation. Suitable for insulated and non-insulated surfaces.

Colors

White, red, light grey, aluminium
Aluminium color shall not be overcoated.

Product data

Solids by volume	70±2%
Gloss level (GU 60°) (ISO 2813)	Matt (0-35)
Flash point (ISO 3679 Method 1)	28°C
Density	1.5 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	125-200 µm
Wet film thickness	180-300 µm
Theoretical spreading range	5.5-3.5 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 2 (ISO 8501-1) if temperature does not exceed 230°C.
Recommended	Sa 2½ (ISO 8501-1).

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.
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Stainless steel

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, which is suitable to achieve a sharp and angular surface profile.

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, which is suitable to achieve a sharp and angular surface profile.

Coated surfaces

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

Shop primed steel

Minimum	Dry, clean and approved inorganic zinc shop primer.
Recommended	Sa 2½ (ISO 8501-1).

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

5:1 (by volume)

Thinner

Litum Thinner No.23, maximum thinning up to 10%.

Induction and pot life

Pot life	2 hours (23°C)
Induction time	20 minutes (23°C)

Airless application

Nozzle tips range (inch/1000):	19-21
Pressure nozzle outlet (minimum):	100 bar

Drying

Surface temperature	10°C	15°C	23°C	40°C	100°C
Touch dry	12h	6h	2,5h	1,5h	20min
Handle (hard) dry	24h	13h	7h	2,5h	20min

Overcoat minimum	13h	6h	2,5h	1,5h	0min
Service dry	25h	21h	18h	3h	1h

The given drying and curing times, as well as over coating intervals for inorganic zinc ethyl silicates are measured at relative humidity (RH) 80% during application and curing. An even higher RH will increase the curing speed. The paint requires continuous RH above 50% to cure.

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

250°C (continuous)

300°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 ethyl silicate, itself

Next coat: itself, silicone acrylic

Packing size

	Volume (L)	Container (L)
Litatherm 250 comp. A	15	20
Litatherm 250 comp. B	3	3

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.

Litatherm 250 comp. A 24 months

Litatherm 250 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.