

Litatank ZPV

Description

This is a two component, polyamide cured, high molecular weight epoxy coating. Designed as a high build, all-purpose coating for new construction. 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, stainless steel, aluminum, concrete, galvanized steel, shop primed steel and thermally sprayed zinc substrates.

Typical use

Suitable for structural steel and piping to be exposed to corrosive environments up to very high and immersed. Recommended for offshore environments, refineries, power plants, bridges, buildings and mining equipment.

Colors

Grey, red, white

Product data

Solids by volume	54±2%
Gloss level (GU 60°) (ISO 2813)	Matt (0-35)
Flash point (ISO 3679 Method 1)	25°C
Density	1.3 kg/l
Volatile organic compounds (VOC)	395 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

Dry film thickness	80-150 µm
Wet film thickness	150-280 µm
Theoretical spreading range	6.8-3.6 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 table

Carbon steel

Minimum	Sa 2½ (ISO 8501-1)
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.

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	Sweep blast-cleaning using nonmetallic abrasive leaving a clean, rough and even pattern.

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	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.

Shop primed steel

Minimum	Dry, clean and approved inorganic zinc shop primer.
Recommended	Sweep blasted or alternatively blasted to Sa 2 (ISO 8501-1) of at least 70 % of the surface.

Concrete

Minimum	Dry abrasive blast cleaning to SSPCSP 13/NACE No. 6.
Recommended	Dry abrasive blast cleaning to SSPCSP 13/NACE No. 6.

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 № 17
For fresh water tanks dilution is not permitted

Induction and pot life

Induction	30 minutes (23°C)
Pot life	8 hours (23°C)

Airless application

Nozzle tips range (inch/1000):	13-23
Pressure nozzle outlet (minimum):	150 bar

Drying

Surface temperature	10°C	23°C	40°C
Touch dry	5h	2,5h	1h
Handle (hard) dry	16h	8h	3,5h
Overcoat minimum	16h	8h	3,5h
Service dry	14d	7d	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

Dry, atmospheric 120°C (continuous)

Dry, atmospheric 140°C (peak)

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

Next coat: acrylic, epoxy, polyurethane, polysiloxan, vinyl epoxy

Packing size

	Volume (L)	Container (L)
Litatank ZPV comp. A	16	20
Litahard Uni 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.

Litatank ZPV comp. A	24 months
Litahard Uni comp. B	48 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.