



# Product Data

## HEMPEL'S GALVOSIL® 15700

BASE 15709 with HEMPEL'S ZINC METAL PIGMENT 97170

**Description:** HEMPEL'S GALVOSIL 15700 is a two-component, solvent-borne, self-curing, inorganic zinc silicate with outstanding resistance against weathering and abrasion. It has excellent chemical resistance within the pH range 6-9. For service temperature range, see below. Applicable by airless spray. Offers cathodic protection of local mechanical damage.

**Recommended use:**

1. As a general purpose, heavy-duty, rust-preventing primer.
2. As a single, complete coating for long-term protection of steel exposed to moderately to severely corrosive environment and to abrasion.
3. As a tank lining in accordance with the CARGO PROTECTION GUIDE. In compliance with SSPC-Paint 20, type 1, level 1 and ISO 12944-5.

**Service temperatures:**

- Resistant to permanent (non-cyclic) dry temperatures as well as occasionally dry peak temperatures up to max. 500°C/932°F. In case of service temperatures above 400°C/752°F, it is of advantage to apply a topcoat of HEMPEL'S SILICONE ALUMINIUM 56910.
- Resistant to cyclic dry temperatures up to 400°C/752°F.
- Resistance to higher temperatures under humid conditions, see REMARKS overleaf.

**Certificates/Approvals:** Certificated by Scientific & Technical Services to comply with the requirements of low moisture fats and oil according to FDA. Approved by Lloyd's Register of Shipping as a recognized corrosion control coating. Meets the requirements laid down by ASTM A-490 Class "B" for Slip-Co-efficient and Creep Resistance.

**Availability:** Part of Group Assortment. Local availability subject to confirmation.

### PHYSICAL CONSTANTS:

Colours/Shade nos: Metal grey/19840  
Finish: Flat  
Volume solids, %: 64 ± 1  
Theoretical spreading rate: 12.8 m<sup>2</sup>/litre - 50 micron  
513 sq.ft./US gallon - 2 mils  
Flash point: 14°C/57°F  
Specific gravity: 2.65 kg/litre - 22.1 lbs/US gallon  
Dry to touch: 30 (approx.) min. at 20°C/68°F (65-75% RH)  
Fully cured: 16 hours at 20°C/68°F and min. 75% RH (See REMARKS overleaf)  
V.O.C.: 535 g/litre - 4.5 lbs/US gallon  
Shelf life: 1 year (25°C/77°F) for liquid 15709 and 3 years for Hempel's zinc metal pigment 97170 (stored in closed container) from time of production. Shelf life is dependent on storage temperature. Shelf life is reduced at storage temperatures above 25°C/77°F. Do not store above 40°C/104°F. Shelf life is exceeded if the liquid is gelled or if the mixed product forms gels before application.

*The physical constants stated are nominal data according to the HEMPEL Group's approved formulas. They are subject to normal manufacturing tolerances and where stated, being standard deviation according to ISO 3534-1.*

### APPLICATION DETAILS:

Mixing ratio for 15700: Liquid 15709 : Hempel's zinc metal pigment 97170  
3.1 parts by weight : 6.9 parts by weight  
(Mixing by volume - see REMARKS overleaf)

Application method: Airless spray Air spray Brush (touch-up)  
Thinner (max.vol.) 08700 (30%) 08700 (50%) 08700 (10%)  
Pot life: 4 hours (20°C/68°F)  
Nozzle orifice: .019"-.023"  
Nozzle pressure: 100 bar/1500 psi  
(Airless spray data are indicative and subject to adjustment)

Cleaning of tools: THINNER 08700  
Indicated film thickness, dry: 50 micron/2 mils (See REMARKS overleaf)  
Indicated film thickness, wet: 75 micron/3 mils  
Recoat interval, min: When fully cured (See REMARKS overleaf)  
Recoat interval, max: None (See REMARKS overleaf)

**Safety:** Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult HEMPEL Material Safety Data Sheets and follow all local or national safety regulations. Avoid inhalation, avoid contact with skin and eyes, and do not swallow. Take precautions against possible risks of fire or explosions as well as protection of the environment. Apply only in well ventilated areas.



## HEMPEL'S GALVOSIL 15700

SURFACE PREPARATION:	Remove oil and grease, etc. with suitable detergent. Remove salt and other contaminants by (high pressure) fresh water cleaning. Abrasive blasting with sharp abrasive to minimum Sa 2½ with a surface profile equivalent to Rugotest No. 3, BN10, Keane-Tator Comparator, min. 3.0 G/S, or ISO Comparator rough Medium (G). In case of new steel to be exposed to no more than medium aggressive (industrial) environment and without any extraordinary demands to lifetime, a surface preparation degree of SSPC-SP6 may suffice. Consult separate APPLICATION INSTRUCTIONS, and - as relevant - the corresponding PAINTING SPECIFICATION for cargo tanks.
APPLICATION CONDITIONS:	The surface must be completely clean and dry with a temperature above the dew point to avoid condensation. At temperatures ranging from 0°C/32°F to 40°C/105°F, curing needs minimum 65% relative humidity and is very retarded at lower temperatures. Consult separate APPLICATION INSTRUCTIONS.
SUBSEQUENT COAT:	<b>As a tank coating:</b> None, i.e. no other paints are acceptable in combination with HEMPEL'S GALVOSIL 15700. Otherwise according to specification.
REMARKS: Service temperatures:	Some of the <b>certificates</b> have been issued under the former quality number 1570. If used as anticorrosive protection <b>under insulation</b> of high temperature equipment it is very important that NO moisture can penetrate during shut-down periods. This to avoid risk of "wet corrosion" when the temperature rises. <b>Wet service temperature</b> , non-saline water: Maximum 60°C/140°F. <b>Wet service temperature</b> , other liquids: Consult the corresponding CARGO PROTECTION GUIDE. Hot sea water washing and (low pressure) steam cleaning should never be executed on tank coatings which have not been in service for at least one month. Contact HEMPEL about temperatures permissible.
Film thicknesses:	If <b>topcoated</b> with a heavy-duty system, 50-80 micron/2-3,2 mils dry film thickness (75-125 micron/3-5 mils wet) is recommended. Consult separate APPLICATION INSTRUCTIONS before recoating. For long-term protection <b>without topcoat</b> , 75 micron/3 mils dry film thickness (100-125 micron/4-5 mils wet) is generally recommended. In tanks 100 micron/4 mils dry film thickness (150 micron/6 mils wet) is recommended but may be applied in 125 micron/5 mils dry film thickness (200 micron/8 mils wet). <b>High temperature service:</b> To avoid cracking during service, it is important to keep the dry film thickness at maximum 40-50 micron/1.6-2 mils, especially in cases where service conditions include sudden temperature changes. (The dry film thickness range does not take into account the correction factors for rough surfaces as listed in ISO 19840).
Mixing:	When mixing part of the content in a can the mixing ratio on volume should be made as follows: Measure 7.4 parts of liquid 15709, then add Hempel's zinc metal pigment 97170 up to a total of 10,0 parts by volume.
Thinning:	For application at high temperatures, a special thinner is available.
Recoating:	Recoating intervals are strongly dependent on both temperature and humidity. Deviations from the standard conditions may shorten or prolong the recoating intervals. Full curing will be obtained after: 0°C/32°F and min. 75% RH: 3 days 10°C/40°F and min. 75% RH: 36 hours 20°C/68°F and min. 75% RH: 16 hours (a certain curing does take place at temperatures below 0°C/32°F, but at an extremely low speed). Furthermore consult separate APPLICATION INSTRUCTIONS.
Curing, cargo tanks:	Before cargo tanks are taken into use, the coating must be completely through-cured. It is recommended to carry out low pressure hosing of the tanks with (fresh) water 2-3 times at ambient temperatures. Let the tanks remain wet between the washings. Reference is made to APPLICATION INSTRUCTIONS.
Note: ISSUED BY:	<b>HEMPEL'S GALVOSIL 15700 is for professional use only.</b> HEMPEL A/S - 1570019840C0028

*This Product Data Sheet supersedes those previously issued.*

*For explanations, definitions and scope, see "Explanatory Notes" in the HEMPEL Book.*

*Data, specifications, directions and recommendations given in this data sheet represent only test results or experience obtained under controlled or specially defined circumstances. Their accuracy, completeness or appropriateness under the actual conditions of any intended use of the Products herein must be determined exclusively by the Buyer and/or User.*

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*Product data are subject to change without notice and become void five years from the date of issue.*



# Application Instructions

For product description refer to product data sheet

## HEMPEL'S GALVOSIL® 15700

### Scope:

These application instructions cover surface preparation, application equipment, and application of HEMPEL'S GALVOSIL 15700.

The following are general rules, which may be supplemented with more detailed descriptions when needed, for instance for major new-buildings/new constructions or extensive repair jobs.

### Steel work:

For optimum performance, eg. relevant for cargo tank coating, the following is recommended:

All welding seams must have a surface finish which ensures that the quality of the paint system will be maintained in all respects. Holes in welding seams, undercuts, cracks, etc. should be avoided. If found, they must be remedied by welding and/or grinding.

All weld spatters must be removed.

All sharp edges must be removed or rounded off in such a way that the specified film thickness can be build-up on all surfaces. The radius of the rounding should be approximately 1-2 mm. Any laminations must be removed.

The steel must be of first class quality and should not have been allowed to rust more than corresponding to grade B of ISO 8501-1:2007.

**Note:** Porous surfaces such as certain types of cast iron cannot be properly protected with zinc silicate. Deeply corroded steel may also be difficult to protect with a zinc silicate.

All steel work (including welding, flame cutting, grinding) must be finished before the surface preparation starts.

### Surface preparation:

Prior to abrasive blast cleaning of the steel, remove oil, grease, salts and other contamination with a suitable detergent followed by high pressure fresh water hosing. Alkali deposits on new welding seams as well as soap traces from pressure testing of tanks to be removed by fresh water and scrubbing with stiff brushes. Control for absence of contamination according to separate guidelines.

On repair jobs, a rough blasting to remove all loosely adhering materials may be required before degreasing/washing is carried out.

**Old steel:** Even after a very thorough cleaning, pits may typically contain contamination in the form of remnants of chemicals/water soluble salts. For this reason, repeated detergent washing plus abrasive blasting may be necessary. After the first blasting, a very thorough vacuum cleaning is carried out in order to see if any "chemical bleeding" occurs as well as controls for water soluble salts (reference is made to separate instructions) are made. Special care should be taken in evaluating pitted areas - ask for special guidelines.

Abrasive blasting with sharp abrasive to min Sa 2½, ISO 8501-1:2007.

To obtain full chemical resistance according to the CARGO PROTECTION GUIDE, the steel surface must be abrasive blast cleaned according to ISO 8501-1:2007, very near to white metal Sa 2½-Sa 3. In practice, this requirement is to be understood as white metal Sa 3 at the moment of abrasive blasting, but allows for a slight reduction at the moment of paint application.

The resulting surface profile must be equivalent to Rugotest No. 3, min. BN 10, Keane-Tator Surface Comparator, G/S min 3.0 or ISO 8503/1 rough Medium (G).



## HEMPEL'S GALVOSIL 15700

In case of new steel to be exposed to no more than medium aggressive (industrial) environment and without any extraordinary demands to lifetime, a surface preparation degree of SSPC-SP6 may suffice.

**Note:** A lower surface profile than specified will cause reduced adhesion and increased tendency to mud cracking.

Use steel grit, aluminium silicate, or similar sharp edged abrasives of a good quality free of foreign matters, soft particles, and the like. Control for absence of contamination according to separate guidelines.

Steel grit with particle sizes of 0.2-1.2 mm or aluminium silicate of 0.4-1.8 mm will usually create the desired surface profile when the air pressure measured at the nozzle is 6-7 bar/85-100 psi.

The compressed air must be dry and clean. The compressor must be fitted with suitable oil and water traps.

When the abrasive blasting is completed, remove residual grit and dust by vacuum cleaning. Abrasive particles not removed by vacuum cleaning are to be removed by brushing with clean brushes followed by vacuum cleaning.

The importance of systematic working must be stressed when blasting. Poorly blasted areas covered with dust are very difficult to locate during the blast inspection made after the rough cleaning.

**Old tank coatings:** Must be completely removed. If the steel is pit corroded, the above guidelines for "Old steel" must be followed.

**Shoppripped surfaces:** When shoppripping is required only zinc silicate shoppripper such as HEMPEL'S SHOPPRIMER ZS 15890 may be used and preferably in a reddish shade.

Before recoating with GALVOSIL 15700, intact shoppripper must be abrasive grit swept in order to obtain specified roughness. A uniform sweep blasting is required, removing minimum 70% of the shoppripper followed by vacuum cleaning to remove accumulated dirt and zinc salts and to ensure adhesion.

Welds, rusty spots, burned areas, and all areas with other types of shopprippers than zinc silicates of a type like HEMPEL'S SHOPPRIMER ZS 15890 must be completely abrasive grit blasted as described above.

### Application equipment:

GALVOSIL 15700 can be applied by conventional spray equipment (pressure pot type), airless spray equipment, or by brush.

**Conventional Spray equipment:** Standard industrial spray equipment with mechanical agitator and pressure regulators, air filters, and water traps.

Air hose: 10 mm (3/8") internal diameter.  
Material hose: 13 mm (1/2") internal diameter.

Hoses should be as short as possible, preferably not longer than 10 metres/30 feet.

Pot pressure: 2.5-5 bar (35-70 psi)  
Atomization pressure: 1.5-2.5 bar (20-35 psi)  
Nozzle orifice: 1.8-2.2 mm (.070"-.085")

(Spray-data are indicative and subject to adjustment).

Thinning, if required: max. 50% of THINNER 08700.

The pressure pot must be placed at the same level as or at a higher level than the spray gun when spraying, owing to the weight of the material. Alternatively a piston-pump (e.g. 10:1) may be used instead of the pressure pot. This will facilitate the use of longer hoses or having the spray gun at a higher level than the pump.



## HEMPEL'S GALVOSIL 15700

When painting undersides, the spray gun will need intermittent cleaning with THINNER 08700 to prevent clogging of the nozzle.

With conventional spray application regulation of the pot and the atomizing air pressures can be made as follows:

1. Shut off the atomizing air.
2. Regulate the pressure in the pot so that the material reaches approximately 60 cm/20" horizontally out from the gun before falling to the ground.
3. Turn on the atomizing air using lowest possible pressure.

**Airless spray equipment:** A large, slow-working pump is preferred, eg. 30:1, with a pump capacity of 8-12 litres/minute. The in-line filter should be 60 mesh.

Gaskets: Teflon  
Nozzle orifice: .019" through .023".  
Fan angle: 40° through 70°.  
Nozzle pressure: 100-150 bar (1400-2100 psi).

(Spray data are indicative and subject to adjustment).

Thinning, if required: max. 30% of THINNER 08700.

### Thinning:

The amount of thinning necessary will depend upon prevailing conditions: Temperature, humidity, wind/ventilation, method of spraying, spray equipment, etc.

In the case of a high level of thinning and/or long stops in application, the mixed paint must be re-circulated to avoid settlement of zinc particles in the spray hoses.

The coating **must** be wet and smooth just after application. Besides correct spray technique, the amount of thinner added must be selected securing this optimum film formation.

Too little thinning will typically lead to dry-spray and too much thinning to sagging and settling of zinc particles in the can or in the spray hoses.

### Cleaning of equipment:

The whole equipment must be cleaned thoroughly with THINNER 08700 after use.

Additionally for conventional spray-guns:

In the case of short stops, prevent packing of zinc around the needle by placing the spray gun in THINNER 08700 and let some air pass the spray gun. In the case of longer stops, clean the spray gun with THINNER 08700.

### Mixing:

- a. Do not open packings until immediately before use. The entire content of the two packings must be used for each batch to ensure a correct mixture. Leftovers in the packings cannot be used later. Protect HEMPEL'S ZINC METAL PIGMENT 97170 against moisture before mixing.
- b. Before mixing, shake or stir the GALVOSIL 15709 LIQUID very thoroughly.
- c. Pour HEMPEL'S ZINC METAL PIGMENT 97170 slowly down into the LIQUID with constant mechanical stirring. Do not mix in the reverse order. Continue stirring until the mixture is free of lumps.
- d. Strain the mixture through a screen, 60 - 80 mesh (250 - 160 DIN Norm. 4188).

### Pot life:

4 hours (20°C/68°F)

### Temperature of paint:

In a hot climate it is important that the cans with LIQUID are kept out of the sun and that the temperature of the liquid is kept below 30°C/86°F in order to avoid excessive dry spray.



## HEMPEL'S GALVOSIL 15700

### Application procedure, general:

Maintain constant agitation of the mixture until the batch is depleted.

The spray gun should be kept at a distance of 30-50 cm from the surface. Hold the spray gun at a right angle to the surface, making even, parallel passes with about 50% overlap.

Besides correct spray technique the amount of thinner added must be carefully adjusted to secure optimum film formation. **The coating must be wet and smooth just after application. It is important to avoid dry-spraying.**

Select small nozzles (small orifice and small fan angle) for spray application of complicated structures, while bigger nozzles may be used for regular surfaces.

The wet film thickness must be checked immediately after application, but it can only be used as a rough guidance because of the fast drying.

### Application procedure, tank coating:

When used as a tank coating, HEMPEL'S GALVOSIL 15700 is normally specified in 1 x 100 micron/1 x 4 mils - minimum 80 micron/3.2 mils, maximum 150 micron/6 mils.

To achieve a correct film formation within these limits, it is recommended to apply two coats "wet-in-almost-dry":

Apply one coat and apply the second coat within 15-30 minutes before the first coat has turned grey but is still dark.

When following this procedure, HEMPEL'S GALVOSIL 15700 must be thinned approximately 15% in order to avoid too high film thicknesses.

Too high film thicknesses on welds in corners must be smoothed by a flat brush, approximately 1" wide.

**When coating tanks, it is of the utmost importance to avoid dry-spray, which is a typical indication of poor film formation.**

Poor film formation of a one-coat tank coating system like HEMPEL'S GALVOSIL 15700 may result in immediate failure.

**Any dry-sprayed areas must be smoothed by scraping with a spatula (rounded corners) or by light sandpapering or by using a cleaning sponge ("3M", "Scotch-brite" type).**

**After vacuum cleaning as necessary, the smoothed areas are applied a thin coat of HEMPEL'S GALVOSIL 15700 achieved by using 20-25% thinning.**

**Note:** If working conditions ask for it some hours may elapse between the first and the second coat provided that the relative humidity is kept constantly low, but it is recommended to finalize the application as soon as possible and within the same working shift.

### Stripe coating:

All places difficult to cover properly by spray application must be stripe coated with a brush immediately before or after the spray application

### Microclimate:

The actual climatic conditions at the substrate during application and until acceptance:

Recommended minimum surface temperature is 0°C/32°F.

The maximum recommended surface temperature is approx. 40°C/104°F. Higher steel temperatures are acceptable provided dry-spray is avoided by (extra thinning and) proper spray application. In extreme cases a reduction of the dry film thickness may also be necessary. In a warm climate it is recommended to carry out application during night time.

The steel temperature must be above the dew point. As a rule of thumb a steel temperature which is 3°C/5°F above the dew point can be considered safe.



## HEMPEL'S GALVOSIL 15700

In confined spaces, supply an adequate amount of fresh air during application and drying to assist the evaporation of solvent. All surfaces must be ventilated. However, avoid ventilators blowing directly onto the freshly applied paint.

### Drying and curing, ventilation:

Correct film formation depends on adequate ventilation during drying.

A good guideline for tank coating work is to ventilate to a calculated 10% of LEL during application and until the coating is dry.

One litre undiluted HEMPEL'S GALVOSIL 15700 gives off in total 160 litres solvent **vapour** until it is completely dry.

The lower explosive limit, LEL, is 0.5%.

To reach a common safety requirement of 10% LEL, the theoretical ventilation requirement is 320 m<sup>3</sup> per litre paint.

Because solvent vapours are heavier than atmospheric air, effective ventilation requires forced ventilation with exhaust from the lowest part of the tank.

During the following period until full curing a few air shifts per hour will suffice. Take actions to avoid "pockets" of stagnant air.

Please contact HEMPEL for further advice.

Actual safety precautions may require stronger ventilation.

It is recommended to keep the relative humidity low during application and drying. Thereafter, let the relative humidity raise by "natural means", i.e. the dehumidifiers are notched off and normal ventilation used. However, it is recommended to let dehumidifiers run until dry film thicknesses have been checked - and if needed - rectified by an extra paint application.

### Curing time:

Curing is dependent on (steel) temperatures and relative humidity.

At 20°C/68°F and min. 75% RH, curing requires min. 16 hours. At lower temperatures and relative humidity, curing time will increase considerably - see Product Data Sheet.

The relative humidity should be minimum 65% - and the minimum temperature 0°C/32°F - during the period of curing. Hosing down of tanks can support curing, but should if possible await the state of "near to complete" curing - please see below.

The coating will resist light showers after 1-2 hours at 20°C/68°F and 75% relative humidity.

**Curing may be promoted at low humidity by hosing down the surface with water 1-2 hours after application and keeping the surface constantly wet until curing is complete. If salt water is used, rinse with fresh water if the surface is to be recoated.**

### State of curing:

Can be checked by rubbing the coating with a rag soaked in THINNER 08700. If the coating remains unaffected, state of curing is sufficient for recoating with other paint materials (when used as a cargo tank coating this state of curing may be described as "near to complete").

### Full curing for cargo loading:

**Before tanks are taken into use, the coating must be completely through-cured. This is secured by low pressure hosing/washing the tanks with (fresh) water 2-3 times after the above described condition of "near to complete curing" has been obtained. By using the tank washing equipment, the normal ½ hour cycle is applied with half a day to one day between washings. Let the tanks remain wet between the washing.**



## HEMPEL'S GALVOSIL 15700

**Full curing is confirmed by rubbing the coating with methyl ethyl ketone.**

**The coating will now be fully resistant according to the CARGO PROTECTION GUIDE.**

**A hydrocarbon wall wash test is recommended to ascertain complete removal of hydrocarbon solvents present in HEMPEL'S GALVOSIL 15700 before loading hydrocarbon sensitive cargoes, e.g. methanol. If the test is positive, carry out additional fresh water washing.**

Full hardness will be obtained after weathering for some time.

### Recommended film thickness:

For long time protection, **when topcoated with heavy-duty systems:**

50 micron/2 mils dry; 75 micron/3 mils wet, (undiluted).

For long time protection, **without topcoat:**

75-100 micron/3-4 mils dry; 125-150 micron/5-6 mils wet, (undiluted).

**In tanks:** 100 micron/4 mils dry; 150 micron/6 mils wet, (undiluted), may be specified.

For a tank coating specification the film thickness should be controlled according to the 80-20 rule, ie 80% of the dry film thickness measurements must be equal to or greater than the specified film thickness (100 micron/4 mils) and of those below the specified film thickness, no measurements must be lower than 80% of the 100 micron/4 mils. For narrow frames, girders and similar areas not being very accessible the film thickness could be controlled according to the 70-30 rule,

**Too high dry film thickness, ie above approximately 150 micron/6 mils dry, should be avoided due to the risk of mud cracking or peeling.** Please observe that according to accepted rules of measuring "a measurement" is to be the mean of three single point measurements taken in close vicinity.

**Note:** Special care is necessary to ensure proper film thickness on welding seams, edges, corners, ribs, etc.

### Extra coat recoating (by itself):

Too low film thickness can be made good by applying an extra coat of HEMPEL'S GALVOSIL 15700. Surface preparation procedure - if necessary - and dilution of paint according to page 4 "Application procedure, tank coating".

Application of an extra coat should be done before full curing is obtained, ie during the curing period with low relative humidity. The relative humidity must be kept below 60%, absolute maximum 65%, all the time until recoating and the painted surface is not exposed to open weather, contamination of the like.

### Spreading rate:

Theoretical (on a smooth surface):

dft, micron	dft, mils	m <sup>2</sup> /litre	sq.ft./US gallon
50	2	12.8	513
75	3	8.5	342
100	4	6.4	257

Practical (with a consumption factor of 1.8):

dft, micron	dft, mils	m <sup>2</sup> /litre	sq.ft./US gallon
50	2	7.1	285
75	3	4.7	190
100	4	3.6	143



## HEMPEL'S GALVOSIL 15700

### Recoating interval (other paints):

HEMPEL'S GALVOSIL 15700 must be fully cured before recoating with a full paint system.

### Topcoating procedure:

Non-weathered zinc silicate coatings are porous and popping may occur in the subsequent coat(s). One way to reduce the risk of popping is to apply a mist coat as the first pass of the subsequent coat, let the air escape, and then apply the remainder of the topcoat.

Some of HEMPEL's products will substantially reduce the risk of popping when applied directly on top of the zinc silicate. See painting specification.

Advanced paint systems are recommended for topcoating, e.g. HEMPADUR qualities.

### Surface cleaning:

The cleaning before topcoating depends on the condition of the surface:

1. Intact zinc silicate surface with sporadic formation of "white rust" (zinc corrosion products).
  - a. Remove oil, grease, dirt, etc. by detergent wash.
  - b. Remove "white rust" by high pressure fresh water cleaning 200-350 bar (2900-5000 psi) at a nozzle-to-surface distance of 15-20 cm (6-8").

If the surface is only slightly contaminated, corresponding to 1-2 months of exposure in a mildly corrosive environment, hosing down of the surface with fresh water and scrubbing with stiff brushes (nylon) may be sufficient and more practical. Check that the coating is through dry before recoating.

2. Zinc silicate surface with extreme formation of "white rust" which cannot be removed as described above.
  - a. Remove oil, grease, dirt, etc. by detergent wash.
  - b. Abrasive blast sweep to remove "white rust", followed by vacuum cleaning to remove abrasives and dust.
  - c. Restore the zinc layer with any solvent borne GALVOSIL quality or zinc epoxy (HEMPADUR ZINC).
3. Damaged areas, burns, weld spatters, etc.
  - a. Remove oil, grease, dirt, etc. by detergent wash.
  - b. Remove weld spatters.
  - c. Abrasive blasting to min. Sa 2½, followed by thorough removal of abrasives and dust by vacuum cleaning.
  - d. Restore the zinc layer with any solvent borne GALVOSIL quality or zinc epoxy (HEMPADUR ZINC).

### Safety:

Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult HEMPEL Material Safety Data Sheets and follow all local or national safety regulations. Avoid inhalation, avoid contact with skin and eyes, and do not swallow. Take precautions against possible risks of fire or explosions as well as protection of the environment. Apply only in well ventilated areas.

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