

DS 071

GALWASOL 19

4 14.02.2022

Zinc Silicate Paint

PAINT TYPE	Zinc ethyl silicate paint, one-pack, fast drying, spontaneously cured under the influence of atmospheric humidity. This product complies with ASTM D520 type II zinc dust
USAGE	For priming or independent protection of steel constructions exposed in the industrial, marine and seaside atmosphere or submerged in solvents and steel constructions exposed to the impact of temperatures up to +400 °C.
SPECIAL PROPERTIES	After drying GALWASOL 19 forms an inorganic zinc silicate coating which protects the steel cathodically, like zincing. Zinc content in the dry coating min. 80%. The paint has an excellent resistance to mechanical abrasion, different solvents and oils, even on immersion and to continuous exposure up to +400 °C.

TECHNICAL DATA

Solids	60±2% vol.		
Total mass of solids	abt. 2100 g/l		
Volatile organic compound (VOC)	abt. 450 g/l		
Recommended film thickness and theoretical spreading rate	Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m ² /l)
	60	100	10,0
	80	133	7,7

Maximum recommended film thickness -wet film thickness 180µm
 -dry film thickness 110µm
 Thicker coats may lead to cracking.

Practical spreading rate The values depend on the application technique, surface conditions, overspray, etc.

Drying time at +23 °C, 50% RH (dry film thickness 70µm)
 - dust dry after 30 min
 - touch dry after 60 min

Overcoatable, (dry film 70µm)

	by itself* and suitable paints on galvanized zinc surfaces	
surface temperature	min.	max.
+ 23°C	6 hours (RH above 80% or wetting of surfaces)	-

* Only for minor repair objects, otherwise please contact Teknos.

Prior to overcoating verify a value of 4 via ASTM D4752 MEK rub test.

Thinner Thinning is not recommended. In exceptional circumstances use TEKNOSOLV 1639 or TEKNOSOLV 779.

Clean up TEKNOSOLV 1639 or TEKNOSOLV 779

Finish Matt

Colours 920 steel grey

SAFETY MARKINGS See Safety Data Sheet.

DIRECTION FOR USE
Surface preparation

Remove from the surfaces any contaminants that might be detrimental to surface preparation and painting. Before cleaning of surface it is recommended to wash it with water with addition of OLICLEAN 123 and then rinse with fresh water.

STEEL SURFACES: Remove mill scale and rust by blast cleaning to preparation grade Sa 2 1/2 (ISO 8501-1). Surface dry, salt-, dust- and grease-free.

The place and time of the preparation are to be chosen so that the prepared surface will not get dirty or damp before the subsequent treatment.

Application conditions

During the application and drying period: the minimum temperature of the surface shall be above -5°C (frost- and ice-free surface), at least 3°C above the dew point of the ambient air and relative humidity of the air 50 – 95%, good ventilation. At low air humidity, it is possible to speed up the process of curing the coat by spraying the painted surface with water. The spraying may be started after 4 hours (at 23°C) from application of the GALWASOL 19 paint.

Application

Before use stir the paint thoroughly.

Apply by airless spray, by conventional spray or brush. The paint must be frequently stirred in the course of work in order to avoid sedimentation of the zinc dust.

Airless spray application recommendation:

nozzle	0,017 - 0,023"
pressure	15 - 20 MPa

While drawing up the painting specification, depending on the destination and type of a construction, it is possible to assume the thickness of a single coat other than the one recommended for application in the manual. During the airless spraying, the typical range of coat thicknesses is from 40 to 100 µm.

Overcoating

For overcoating can be used epoxy, vinyl or silicon Teknos-~~Oliva~~ paints in accordance with the specification. The next paint coats may be applied only after the GALWASOL 19 coat is cross-linked. The unseasoned silicate-zinc coatings are porous and therefore, the bubbling and cratering of the coating may occur during the application of the consecutive layers. In order to counteract this phenomenon, apply the interlayer in the form of a thin EPIWELD red paint coat or EPIRUST paint thinned with an admixture of 10 – 15% of the TEKNOSOLV 9506 or TEKNOSOLV 564.

ADDITIONAL INFORMATION

The storage stability is shown on the label. Store in a cool place and in tightly closed containers.

Additional instructive information for surface preparation can be found in standards EN ISO 12944-4 and ISO 8501-2.

The information of this data sheet is normative and based on laboratory tests and practical experience. Teknos guarantees that the product quality conforms to our quality system. Teknos accepts, however, no liability for the actual application work, as this is to a great extent dependent on the conditions during handling and application. Teknos accepts no liability for any damage resulting from misapplication of the product. This product is intended for professional use only. This implies that the user possesses sufficient knowledge for using the product correctly with regard to technical and working safety aspects. The latest versions of Teknos data sheets, material safety data sheets and system sheets are on our home pages www.teknos.com.
