ZINGASPRAY

Zingaspray offers the film galvanising system ZINGA in an aerosol spray for easy small applications. ZINGA contains 96% zinc in the dry film and provides cathodic protection to ferrous metals. Zingaspray is ideal for the repair and touch up of small areas and welds on galvanized steel structures or structures coated with ZINGA.

PHYSICAL DATA AND TECHNICAL INFORMATION

WET PRODUCT

Components	- Zinc powder - Aromatic hydrocarbons - Binder
Density (without propellant)	1,63 kg/dm³ (±0,05 Kg/dm³) at 20°C
Solid content (without propellant)	- 25% by volume (±2%) - 55% by weight (±2%)
Propellant	Dimethylether (DME)
Flash Point	-41°C (~propellant)
VOC	668 g/L

DRY FILM

Colour	Zinc Grey
Gloss	Matt
Special characteristics	- Atmospheric temperature resistance of dry film » Minimum: -40°C » Maximum: 120°C with peaks up to 150°C - pH resistance in immersion: 5,5 pH to 9,5 pH. - pH resistance in atmospheric conditions: 3,5 pH to 12,5 pH. - Excellent UV resistance
Temperature resistance	- Minimum -40°C - Maximum +120°C

PACKING

500 ml	Available. Spray can

CONSERVATION

Shelf life	5 years in the original, unopened package if shaken mechanically 3 years after production date.
Storage	Store vertically in a dry environment at temperatures between +5°C and +35°C (preferably at room temperature ±18°C)

CONDITIONS

SURFACE PREPARATION

Cleanliness	- Zingaspray can be applied on ferro-metals and damaged zinc surfaces. - For optimal performance, the metal should first be degreased, for example by high pressure water washing. Alternatively, the surface can be degreased using solvent (e.g. Zingasolv), but **never use white spirit**. - For optimal performance, clean to SA 2,5 (ISO 8501:2007). For non-critical (small) areas, cleaning to St 3 is sufficient (using a steel brush).
Roughness	- Zingaspray should ideally be applied on a metal substrate that has a roughness grade **medium G** according to the standard ISO 8503-2:2012. - This can be obtained by **blasting**. **Make sure that the surface is degreased before the blasting.** - On surfaces with a hot-dip galvanisation or metallisation layer, sweep blasting is recommended. All zinc corrosion products must be removed in order to ensure a good electrochemical connection between the two layer. A surface profile of appr. Rz 30 µm is sufficient. For more information please consult document 'Zinga reloading and ZINGA on HDG or METALLISATION' - For small, non-critical areas roughness can be obtained by using an electric rotative or manual steel wire brush.
Maximum time to application	Apply the Zingaspray as soon as possible on the prepared metal substrate before any contamination or corrosion occurs before coating. Otherwise the surface must be cleaned again as described above.

ENVIRONMENTAL CONDITIONS DURING APPLICATION

Ambient temperature	- Minimum 5°C - Maximum 50°C
Relative humidity	- Maximum 95% - Do not apply on a damp or wet surface
Surface temperature	- Minimum 3°C above the dew point - No visual presence of water of ice - Maximum 60°C
Product temperature	During application the temperature of the ZINGA liquid should remain between 5 and 25°C. A **lower** or **higher** temperature of the product will influence the smoothness of the film when drying.

APPLICATION INSTRUCTIONS

GENERAL

Shaking	Zingaspray must be shaken **thoroughly** before application. Shake the can vigorously for **minimum 30 seconds** after liberating the balls. Repeat this every time the can is not used for some time.
Application	Keep the spray 30 cm away from the substrate and move in a continuous speed from left to right. Repeat with a spray application from top to bottom.
Cleaning	- Cleaning of equipment or spills with Zingasolv or aromatic solvent. - **After each use, hold the spray upside down & press on the spray button to avoid blocking upon next use.**

OTHER INFORMATION

COVERAGE AND CONSUMPTION

Theoretical coverage	For 40 µm DFT: 6,25 m^2/L
Theoretical consumption	For 40 µm DFT: 0,16 L/m^2
Practical coverage and consumption	Depends upon the roughness profile of the substrate and the application method.

DRYING PROCESS AND OVERCOATING

Drying process	Zingaspray dries by evaporation of the solvent. The drying process is influenced by the total WFT, the ambient air (humidity and temperature), the ventilation and the steel surface temperatures.
Drying time	For 40 µm DFT at 20°C in a well-ventilated environment: » Dust dry: 15 minutes » Touch-dry: 30 minutes » Dry to handle: 90 minutes » Fully cured: 24 hours
Overcoating with a new layer of Zingaspray	- Zingaspray, as a standalone system, should be applied in 2 layers; apply the second coat 1 hour after touch-dry. - Maximum overcoat time depends on the environmental conditions. If zinc salts have formed, they should be removed first.
Reliquidisation	- Each new layer of Zingaspray reliquidises the former Zingaspray layer so that both layers form one homogeneous layer. - Therefore, Zinganised structures can be reloaded with Zingaspray after the Zinc layer has depleted due to cathodic protection. - For surface preparation on old Zinganised surfaces, contact a Zingametall representative or see document 'ZINGA Repair and Touch-up'.
Overcoating with a compatible paint	Zingaspray can be overcoated with a wide range of compatible paints. In order to avoid blistering, pinholes and other defects (which will negatively affect the performance of the Zingaspray layer), **it is advised to apply any topcoat with a mist/full coat technique**. First, a thin **continuous** layer is applied which gives air bubbles easy passage through the film. This mist coat also provides a barrier for aggressive solvents in the topcoat. Mist coat: - Application at least 4 hours after Zingaspray is touch-dry. - 15 to 30 µm DFT (continuous layer). - Normal dilution according to the technical data sheet of the topcoat. Full coat: - Application at least 2 hours after the mist coat is touch-dry. - Specified layer thickness minus 15 to 30 µm DFT (of mist coat). - Normal dilution according to the technical data sheet. To avoid any problems with application of topcoats, **we advise the use of a sealer**. Zingametall offers two compatible sealers which have been tested according ISO 12944: Zingalufer (PU sealer) and Zingaceram HS (EP sealer).

RECOMMENDED SYSTEM

Unique system	Zingaspray is advised for **touch-up** (HDG, metallisation or on ZINGA) and application on small areas only. It should be applied in two layers/coats.
Zingaspray + Colorspray By ZINGA	Zingametall has a range of colour sprays available which are directly applicable on ZINGA/Zingaspray.

For more specific and detailed recommendations concerning the application of Zingaspray, please contact a Zingametall representative. For detailed information about the health and safety hazards and precautions for use, refer to the Zingaspray safety data sheet.