

ALUSPRAY

ALUSPRAY is an aerosol aluminium-flake coating, designed for easy application on small areas. It can be applied directly onto old, uncorroded hot-dip galvanised, metallised, or other zinc-aluminium-magnesium (ZAM) coated surfaces, or as aluminium topcoat on top of ZINGA. ALUSPRAY delivers a bright metallic finish that restores the appearance of galvanised surfaces. ALUSPRAY can be applied directly onto a clean and rough substrate under a wide range of atmospheric conditions.

PHYSICAL DATA AND TECHNICAL INFORMATION

WET PRODUCT

Type	Aluminium aerosol coating
Density	0.87* kg/dm ³ (±0,05 Kg/dm ³)
Solid content	14% by weight* (±2%) 25% by volume* (±2%)
Propellant	Butane / Propane
VOC	625 g/L

DRY FILM

Colour	Aluminium (~RAL 9006: comparable to HDG)
Gloss	Metallic shine
Typical layer thickness	30 – 120 µm DFT (microns) (See clause Recommended Systems)
Temperature resistance	From -40°C to +120°C, with peaks up to +150°C
pH resistance	Atmospheric: 3.5 to 12.5 pH Immersion: 5.5 to 9.5 pH
UV resistance	Excellent
Each new layer of ALUSPRAY re-liquidises the previous layer, allowing seamless fusion into a single coating. Therefore, structures coated with ALUSPRAY can be easily repaired with a new layer of ALUSPRAY.	

CONSERVATION

Shelf life	Minimum 5 years in the original, unopened packaging.
Storage	Store in a dry, well-ventilated storage area between +5°C and +30°C.

APPLICATION CONDITIONS

Ambient temperature	0°C – +50°C
Relative humidity	Maximum 95% RH. Do NOT apply on a damp or wet surface
Surface temperature	Minimum 3°C above dewpoint Maximum 60°C No visual presence of water or ice
Product temperature	+5°C – +30°C ALUSPRAY can still be applied outside this temperature range but this shall influence the smoothness of the dry layer.

COVERAGE AND CONSUMPTION

Theoretical	Coverage	Consumption
40 µm DFT	1,6 m ² /spray	0,64 spray/m ²
90 µm DFT	0,69 m ² /spray	1,4 spray/m ²
<i>Practical</i> : Depends on the roughness profile of the substrate and the wastage factor.		

PACKAGING

500 mL	Available.
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SURFACE PREPARATION

GENERAL

ALUSPRAY is to be applied on a clean and dry surface, preferably with some roughness to ensure adhesion. The prepared surface shall be free from oil, grease, dirt, dust, rust, mill scale, oxides, corrosion products and other foreign matter.

SURFACE PRE-CLEANING

If the surface has any form of contamination in the form grease, oil, dirt and other foreign matter, this shall be removed by the appropriate means before commencement of the next phase.

Any remaining residue from the pre-cleaning process shall be removed by a final rinse with clean water and blown dry with clean dry compressed air.

Consult a ZINGAMETALL representative / distributor for maximum allowable surface salt concentration.

SURFACE PREPARATION

It is strongly recommended that all surfaces shall be in compliance with **ISO 8501-3 Table 1, minimum P2** and that all sharp edges shall have a radius of minimum of 2 - 3 mm prior to any surface preparation work.

Steel

Surface cleanliness	Minimum	Recommended
Abrasive grit blasting	SSPC-SP 6 / NACE No. 3	Sa 2.5 / SSPC-SP 10 / NACE No. 2
Hand / Power tool cleaning	St 2 (ISO 8501-1)	St3 (ISO 8501-1) / SSPC-SP 11
UHP waterjetting	SSPC-SP WJ-1 / NACE WJ-1 / Wa 3 (ISO 8501-4)	
Laser cleaning	PLA-TA (AMPP SP21511-1)	
Surface profile	25 – 60 µm Rz / ISO 8503-1 - Fine (G)	

Hot-Dip Galvanised steel (HDG), ZAM (zinc, aluminium, magnesium) and Metallised Steel (TSZ or TSZA)

Surface cleanliness	HDG or ZAM	TSZ or TSZA
New	Sweep blasting: SSPC-SP 16 / ASTM D 6386 Hand and/or power tool cleaning: Controlled roughening of the surface	Remove any zinc corrosion products before application.
Weathered and intact – <i>Removing white rust (zinc corrosion products)</i>	Steam cleaning or high pressure waterjetting Sweep blasting: SSPC-SP 16 / ASTM D 6386 Hand and/or power tool cleaning	
Surface profile	Minimum 25 µm Rz	

De-dusting	Prior to the application of ALUSPRAY the surface shall be properly de-dusted with non-contaminated compressed air. Maximum allowed dust contamination: Class 2 - ISO 8502-3
Maximum time to application	Apply the ALUSPRAY as quickly as possible on the prepared metal substrate to prevent any potential contamination or corrosion prior to coating. Otherwise, the surface will need to be cleaned again following the previously outlined procedure.

For more information, please consult a ZINGAMETALL representative / distributor.

APPLICATION INSTRUCTIONS

GENERAL

Shaking	ALUSPRAY must be vigorously shaken before application. Shake the aerosol can vigorously for minimum 30 seconds after liberating the mixing balls. Repeat this every time ALUSPRAY is not used for some time.
Application	Hold the spray can 30 cm from the substrate and apply using a continuous side-to-side motion. Repeat with a perpendicular pass for optimal coverage.
Cleaning	Clean equipment and spills with ZINGASOLV or an aromatic solvent. After each use, hold the spray can upside down and press the spray button to prevent clogging.

DRYING TIME *(40 µm DFT in a well-ventilated environment)*

Air Temp.	10°C	20°C	30°C
Dust dry	20 minutes	15 minutes	5 minutes
Touch dry	30 minutes	20 minutes	10 minutes
Dry to handle	90 minutes	60 minutes	30 minutes
Fully cured	24 hours	20 hours	18 hours

ALUSPRAY dries by evaporation of the solvent. The drying process is influenced by the total WFT, the environmental conditions (humidity, air temperature, wind speed), and the steel surface temperature.

OVERCOATING *(In a well-ventilated environment)*

Overcoating with a new ALUSPRAY layer

Air Temp.	10°C	20°C	30°C
ALUSPRAY*	2 hours	1 hour	30 min.

**after touch-dry*

Any intermediate coat contamination that could disturb the adherence of the next coat should be removed by appropriate cleaning.

RECOMMENDED COATING SYSTEMS

- ALUSPRAY can be used as a stand-alone system or as a top coat in a multi-layer system.
- ALUSPRAY is advised for touch-up (HDG, metallisation, ZAM or on ZINGA) and application on small areas.
- ALUSPRAY is generally applied in 2 layers.

HEALTH & SAFETY

Always wear appropriate personal protective equipment (PPE) such as safety gloves and goggles. In case of insufficient ventilation, wear suitable respiratory protection.

For detailed information about the health and safety hazards and precautions for use, refer to the ALUSPRAY safety data sheet.

For more specific and detailed recommendations concerning the use and application of ALUSPRAY, please contact the Zingametall representative / distributor.

The information on this sheet is merely indicative and is given to the best of our knowledge based on practical experience and testing. The conditions or methods of handling, storage, use or disposal of the product cannot be controlled by us and are therefore outside our responsibility. For these and other reasons we retain no liability in case of loss, damage or costs that are caused by or that are linked in any way to the handling, storage, use or disposal of the product. Any claim concerning deficiencies must be made within 15 days upon reception of the goods quoting the relevant batch number. We retain the right to change the formula if properties of the raw material are changed. This data sheet replaces all former specimens.