



# GEOMET® 321

BASE COAT



METALLIC SILVER COLOR



WATERBASED

6-15  $\mu\text{m}$

LOW THICKNESS

## FUNCTIONALITIES

### Corrosion protection

GEOMET® 321 alone or in combination with our range of topcoats passes the most severe corrosion cyclic tests. It protects parts from rust even after mechanical damages, such as stone chipping, thanks to its self-healing property. It also ensures bimetallic compatibility with aluminum alloys. Its nominal thickness can be adjusted (from 6 to 15  $\mu\text{m}$  and from 1 to 3 layers depending the type of application process) to meet the expected performance.

**720-2000 h**

(ISO 9227/ASTM B117/JIS Z2371)

Results depend on substrate, geometry of parts and type of application processes.

### Temperature resistance

Performances maintained up to 300°C.

### Static friction

Static friction coefficient > 0.20.

### Electrical properties

Conductive and offers perfect galvanic properties to avoid bi-metallic corrosion in most of industrial assemblies (cast iron, carbon steel and aluminum alloys).

### Paintability

Excellent surface conditions for paints or additional coatings.

### No hydrogen embrittlement

Implemented via non-electrolytic application processes. This avoids the hydrogen embrittlement phenomenon that causes cracking of metals.

## APPLICATION

### Processes

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GEOMET® 321 is applied via bulk dip/spin, rack dip/spin, spray or electrostatic spray. This variety of processes allows to coat all types of parts, even those requiring partial coating, or with recessed and hollow surfaces. Moreover, they are non-electrolytic and thus avoid the phenomenon of hydrogen embrittlement which causes cracking of metals.



## TECHNOLOGY

### Waterborne zinc flake

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GEOMET® 321 is a patented technology composed of passivated zinc and aluminum flakes in a binder. It has been developed to comply with the highest industrial requirements and regulations regarding environment, health and safety. It is water-based, chrome-free and nonylphenol-free.

Compliant with

REACH - Registration, Evaluation, Authorization and restriction of Chemicals

2011/65/EU and (EU) 2015/863 - Directive of the European Parliament on the restriction of the use of certain hazardous substances in electrical and electronic equipment

ASTM F1136 / F1136 M- Zinc/Aluminum Corrosion Protective Coatings for Fasteners

EN 13858- Corrosion protection of metals - Non-electrolytically applied zinc flake coatings on iron or steel components

EN ISO 10683- Fasteners - Non-electrolytically applied zinc flake coating systems

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