

# GEOMET<sup>®</sup> 321

## The world's choice for corrosion protection

GEOMET<sup>®</sup> 321 is applied to protect fasteners and many type of metallic parts from corrosion and is used in many industries. It can be combined with PLUS<sup>®</sup>, DACROLUB<sup>®</sup> or GEOKOTE<sup>®</sup> topcoats to provide a very broad range of friction coefficients. It is the most widely used product in zinc flake technology.

- Thin dry-film, non-electrolytic
- Water-based chemistry
- Passivated zinc and aluminium flakes in a binder, patented chemistry
- Chrome free alternative to DACROMET<sup>®</sup> 320
- Metallic silver appearance

### Characteristics and performance\*

- The coefficient of friction can be adjusted to targeted values ranging from 0.06 to 0.20 (ISO 16047) with NOF METAL COATING GROUP's selected topcoats
- It can be used with or without topcoat
- No hydrogen embrittlement
- Excellent assembly and multi-tightening behavior (with lubricated topcoat)
- Good mechanical damage (test method D24 1312, USCAR 32) and chemical (test VDA 621-412) resistance
- Performance maintained at elevated temperatures (up to 300 °C)
- Paintable coating
- Electrical conductivity for most application processes
- Bimetallic compatibility with aluminum

### High corrosion resistance\*

| Coating Weight                  | Salt Spray Test (ISO 9227/ASTM B117)                           | Cyclic Test  |
|---------------------------------|--|--|
| > 24 g/m <sup>2</sup>           | > 240 hours without white rust<br>> 720 hours without red rust |  |
| > 24 g/m <sup>2</sup> + topcoat | > 720 hours without red rust                                   | 4 cycles ACT<br>60 cycles GMW 14872<br>60 cycles SAE J2334 |
| > 36 g/m <sup>2</sup>           | > 1000 hours without red rust                                  |  |

\* Results may vary depending on substrate, geometry of parts and type of application processes



**NOF METAL COATINGS  
GROUP**



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## Application process

GEOMET® 321 can be applied by Dip-Spin, Spray, Dip-Drain-Spin using bulk or rack

## Health and Safety

- Aqueous dispersion
- Complies with REACh
- Complies with the 2000/53/CE and 2002/95/CE directives

## Among our worldwide specifications

- BMW (GS 90010)
- CHRYSLER (PS-5873, PS-9666)
- DAIMLER (DBL 9440)
- FIAT (Capitolato 9.57513)
- FORD (S438)
- GENERAL MOTORS (GMW3359-GMW14)
- IVECO (18-1101)
- PORSCHE (PN 11011)
- RENAULT (01-71-002)
- RENAULT Trucks (01-71-4002)
- VOLKSWAGEN (TL245)
- VOLVO Cars (VCS 5737,29)
- ALSTOM (DTRF 150213)
- BOMBARDIER (BT/CE-WN30-02)
- CATERPILLAR (1E1675G)
- JOHN DEERE (JDM F13)
- KNORR BREMSE (N12005)

## International standards

**EN ISO 10683** - Fasteners: non-electrolytic zinc flake coatings

**EN 13858** - Non-electrolytic zinc flake coatings on iron and steel parts

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

