GEOMET®

Hobson Engineering offers the Geomet water based inorganic coating on a select range of Schnorr® Safety Washers and by request on all Schnorr products.

Geomet was formally known as DACROMET® before the contents of Chromium 6+ was removed.

GEOMET®

GEOMET® is a proprietary water-based coating dispersion containing metal oxides, metallic zinc and aluminum flakes. The zinc and aluminum platelets align in multiple layers forming a metallic silver-gray coating. Applied as a liquid, the coating becomes totally inorganic after curing at 575-600° F (300-315°C).

Environmental Benefits

CHROMIUM-FREE- Does not contain any chromium (NO HEXAVALENT and NO TRIVALENT) GEOMET® meets the following regulations:

- Environmental Protection Agency (EPA)
- Occupational Safety and Health Administration (OSHA)
- DaimlerChrysler CS-9003
- General Motors GMW 3059
- Ford WSS-M99P9999-A1 (Hex 9)
- EU Directive on End of Life Vehicles

VOC COMPLIANT - Under U.S. EPA ACT

And has been homologated for use by virtually all major vehicle and equipment manufacturers including:

- **Porsche (PN-11011)**
- **BMW (GS90010)**
- **John Deer (JDM F13)**
- **Caterpillar (IE16756**

International Standards

Geomet 321 meets:

- ENISO 10683 Fasteners: Non-Electrolytic Zinc Flake Coatings.
- EN13858 - Non-Electrolytic Zinc Flake Coating on Iron and Steel Parts.
- ASTM F1136 – F1136M – Zinc/Aluminium Corrosion Protective Coatings for Fasteners.

GEOMET®

Functional Benefits

Hydrogen Embrittlement Free Process- Coating application process does not require acid pickling or involve electroplating

Bimetallic Corrosion Resistant- Aluminum flake eliminates the typical bimetallic cell of most zinc coatings when mated with aluminum or steel

Solvent Resistant- Inorganic nature causes it to be resistant to organic solvents

Heat Resistant- Maintains corrosion resistance even following a heat shock of 3 hours at 550° F (288° C)

Conductive- Concentration of metallic flake allows an electrical current to be passed to the substrate

Reduction in the co-efficient at Friction

Properties

Colour: Matt-Silver

Coating Thickness
- Class A - 5-8 µm
- Class B - 8-10 µm

Corrosion Resistance
- Class A > 480 hours
- Class B > 720 hours

Correct Ordering Designation
- GEOMET 321 A or
- GEOMET 321 B

Approved for release: P. Hobson
Date: 23/03/2011
Version: 1.1