AnoChem TCP

Hex Chrome Free, ROHS Compliant, Chemical Conversion for Aluminum

Quality Finishing and Support Operations. Since 1960.

Coating Description

- 100% hexavalent-chromium free conversion coating for aluminum and its alloys; ROHS compliant finish meeting MIL-C-5541
- harder, denser and more abrasion resistant finish than chromate coatings it replaces
- highly corrosion resistant exceeding salt spray requirements of MIL-C-5541, MIL-DTL-81706 and AMS 2473
- outperforms conventional chromate coatings in corrosion resistance testing on high copper bearing aluminum alloys 2024 and 2019
- unlike chromate conversion coatings, corrosion resistant properties don't degrade upon exposure to temperatures above 140° F
- blue-bright finish without characteristic iridescent color of chromate conversion coatings commonly referred to as Alodine® or Iridite® (1)
- meets ASTM B 921, *Non-hexavalent Chromium Conversion Coatings*, for Class 1 maximum corrosion resistant finish on aluminum alloys
- compliant with IBM finishing Code 41-218A as well as Lucent specification WL-2156, Chemically Oxidized Aluminum # 571 finish

(1) Alodine is a trademark of Henkel, Madison Heights, MI; Iridite is a trademark of MacDermid, Waterbury, CT

Characteristic Properties

Corrosion Resistance:

Heat treatable aluminum alloys withstand 168 hours of salt spray per ASTM B 117 or ISO 3768 without evidence of basis metal corrosion beyond that minimum permitted per specification

Electrical Contact Resistance (milliohms/cm^2):

Chemical Treatment	As Coated	After 168 hrs Salt Spray
AnoChem TCP	0.25	0.51
Conventional Hex Chromate (1)	0.24	0.73

Organic Coating Adhesion:

Organic coatings applied to AnoChem TCP pass the adhesion test ASTM D 3359, ISO 2409, and Method 6301 of MIL-STD-141

Developed and patented by the United States Navy (Patent # 6,375,726), finish has demonstrated performance on the US Marines' Advanced Amphibious Assault Vehicle shown here and is under test by the Navy on F/A-18 airframes and tail sections of the S-3 aircraft.

Summary

AnoChem TCP replaces hexavalent chromate conversion coatings used for aluminum alloys without sacrificing corrosions resistance, electrical contact resistance or organic topcoat adhesion properties while meeting regulatory requirements of ROHS, WEEE and ELV legislation. AnoChem TCP, is exclusively available from Anoplate Corporation of Syracuse, NY. For more information go to: www.anoplate.com