DEFENSE & CIVILIAN SPECIFICATIONS

The following listing has been compiled from the latest available edition of the Department of Defense Index of Specifications and Standards (DODISS), which includes unclassified Federal and Military specifications, standards, and related documents as well as non-government standards adopted for DOD use. Note: Only “active” files are included here.

ALUMINUM & ALUMINUM ALLOYS
AMS2477—Conversion Coating for Aluminum Alloys, Low Electrical Resistance
ASTM-B921-02—Standard Specification for Non-hexavalent Chromium Conversion Coatings on Aluminum and Aluminum Alloys
ASTM-D1730-09—Standard Practices for Preparation of Aluminum and Aluminum-Alloy Surfaces for Painting
ASTM-D1731-09—Standard Practices for Preparation of Hot-Dip Aluminum Surfaces for Painting
MIL-A-8625F (1)—Anodic Coatings for Aluminum & Aluminum Alloys
MIL-DTL-512C NOT 1—Aluminum Powder, Flaked, Atomized
MIL-DTL-5541F—Chemical Conversion Coatings on Aluminum/Alloys
MIL-DTL-83488D—Aluminum Coating (High Purity)
MIL-HDBK-341—Process for Coating Aluminum & Silicon Diffusion
MIL-M-17999C NOT 1—Metal, Expanded, Aluminum

BLACK OXIDE
AMS2485J—Coating, Black Oxide
MIL-DTL-13924D NOT-1 Black Oxide Coating for Ferrous Metals

CARC COATINGS
MIL-DTL-53039B—Aliphatic Polyurethane, Single Component, Chemical Agent Resistant Coating
MIL-DTL-53072C—Application of CARC Coating; Quality Controls
MIL-DTL-53084A—Primer, Cathodic Electrodeposition (CARC)
MIL-DTL-64159—Water Dispersible Aliphatic Polyurethane, Chemical Agent Resistant Coating

CHROMIUM AND CHROMIUM ALLOY PLATING
AMS2438B—Chromium Plating: Thin, Hard, Dense Deposit
ASTM-B630-88(2006)—Standard Practice for Preparation of Chromium for Electroplating with Chromium
ASTM-B921-02—Standard Specification for Non-hexavalent Chromium Conversion Coatings on Aluminum and Aluminum Alloys
MIL-C-20218F NOT 1—This specification covers porous, electrodeposited chromium plating applied to surfaces where a lubricating film must be sustained, such as cylinder bores.
MIL-DTL-14538D NOT 1—Chromium Plating, Black (Electrodeposited). Generally applied to steels but may be used as a plating for other metals such as brass, copper, iron, and chromium.
MIL-DTL-23422F—Chromium Plating (Electrodesposited)

CLEANING & SURFACE PREPARATION
AMS1377—Remover for Paint Epoxy and Polyurethane Paint System Non-
Chlorinated Solvent
AMS1375B—Remover for Paint, Epoxy and Polyurethane Paint Systems
AMS1374A—Remover for Polyurethane/Epoxy Paint Alkaline, Hot-Tank Type
AMS1385A—Compound, Hot Carbon and Paint Remover for Aircraft Turbine Engine Components
AMS2480—Phosphatation Treatment Paint Base
AMSC27725—Coating, Corrosion Preventative for Aircraft Integral Fuel Tanks
AMSC83231A—Coatings, Polyurethane, Rain Erosion Resistant for Exterior Aircraft and Missile Plastic Parts
AMSC83445A—Coating System: Polyurethane, Non-yellowing, White, Rain Erosion Resistant, Thermally Reflective
AMSR81903—Acid Activated Remover for Amine-Cured Epoxy Coating Systems
AMS1388A—Remover for Temporary Coating Alkaline Type, Water Base
AMS1376B—Remover for Epoxy Paint Acid-Type, Thickened
AMS3167—Solvents, Wipe for Cleaning Prior to Primer & Topcoat
AS7109/4—NADCAP Requirements for Stripping of Coated Material
AMSP38336—Primer Coating, Inorganic, Zinc Dust Pigmented, Self-Curing, for Steel Surfaces
ASTM-A967-05el—Standard Specification for Chemical Passivation Treatments for Stainless Steel Parts
ASTM-B851-04—Standard Specification for Automated Controlled Shot Peening of Metallic Articles Prior to Nickel, Autocatalytic Nickel, or Chromium Plating, or as Final Finish
ASTM-D7055-04—Standard Practice for Preparation (by Abrasive Blast Cleaning) of Hot-Rolled Carbon Steel Panels to Test Coatings
DOD-P-15328D(1) NOT 1—Primer, Pretreatment for Metal Surfaces
MIL-B-23958A(1)—Metal Brightening for Aircraft (Brush, Cleaning)
MIL-C-8514C(1)—Coating Compound Metal Pretreatment Resin Acid
MIL-C-43616C(2)—Cleaning Compounds Aircraft Surface
MIL-C-46487 NOT2—Cleaning & Preparation, Organic Coatings
MIL-DTL-053022C—Primer, Epoxy Coating (Lead, Chromate Free)
MIL-P-53022B—Primer: Epoxy Coating (Chromate Free)
MIL-P-81985(1)—Cleaning & Preparation, Organic Coatings
MIL-P-85499—Primer Material
MIL-P-85891A(2)—Plastic Media (For Removal of Organic Coatings)
MIL-PRF-6864E—Cleaning Compound, Solvent, Oil Cooler
MIL-PRF-9954B—Glass Beads for Cleaning & Peening
MIL-PRF-11090H(1)—Degreasing & Depreserving Solvent
MIL-PRF-26915D—Primer (Coating Steel)
MIL-PRF-83756D—Blast Cleaning Machines
MIL-PRF-83936C—Paint Remover (Aircraft Wheels & Landing Gear Components)
MIL-PRF-85582D(1)—Primer Coatings: Epoxy, Waterborne
MIL-PRF-87937D—Cleaning Compound (Aerospace Equipment)
MIL-PRF-87978A—Paint Remover (Aircraft Wheels & Landing Gear Components)
TT-P-1757B—Primer Coating: One-Component Alkyd Base
TT-P-2760A—Primer Coating: Polyurethane, High Solids
TT-R-2918A-NOT 1—Paint Removal (No Hazardous Air Pollutants)

COATING MATERIALS, METHODS
A-A-59166—Coatings for Non-Slip Walkways on Aircraft Surfaces
AMSS2447C—Thermal Spray Coating, High Velocity Oxygen/Fuel Process
AMSS2526B—Molybdenum Disulfide Coating, Thin Lubricating Film, Impingement Applied
AMSS2506—Coating of Fasteners, Aluminum Filled, Ceramic Bonded Coating
AMSS2516D—Polytetrafluoroethylene (ptfe) Resin Coating, High Build, 370-400Mdc (698-752Mdf) Fusion
AMSS2515E—Polytetrafluoroethylene (ptfe) Resin Coating, Low Build, 370-400Mdc (698-752Mdf) Fusion
AMSS3678B—Polytetrafluoroethylene (PTFE) Moldings and Extrusions, Unfilled, Pigmented, and Filled Components
Algorithm for Coating Selection

AMS3095A—Paint: High Gloss for Airline Exterior System
AMS3120F—Glyceryl Phthalate, Black Baking Enamel
AMS3125F—Glyceryl Phthalate, Engine Gray Baking Enamel
AMS3138D—Fluorocarbon Elastomeric Coatings (various)
AMS3140—Coating: Urethane, Aliphatic Isocyanate, Polytetrafluoroethylene Filled
AMS3145C—Paint, Marking Epoxy
AMS3143A—Powder Coating Materials, Epoxy
AMS3143—Powder Coating Materials, Epoxy
AMS2525C—Graphite Coating: Thin Lubricating Film Impingement Applied
AMS2437C—Coating: Plasma Spray Deposition
AMS2437—Coating: Plasma Spray Deposition
AMS2525—Graphite Coating: Thin Lubricating Film Impingement Applied
AMSP21600—Paint System, Fluorescent, Removable, for Aircraft Application
AMS3108E—Primer, Ocher, Phenolic
AMS3116—Primer Coating Epoxy, Chemical & Solvent Resistant, Non-Chromate
AMS3136E—Coating Material: Phenolic Resin, pte Filled Pigmented, 150Mdc (302Mdf) Cure
AMS3130F—Vehicle Paint, Glyceryl Phthalate
AMS3140—Coating: Urethane, Aliphatic Isocyanate, Polytetrafluoroethylene Filled
AMSC83231—Coatings, Polyurethane, Rain Erosion Resistant, Aircraft & Missiles
AS4984—Coating Requirements for Aerospace Hand Tools
AS133341—Process for Barrier Coating of Anti-Friction Bearings
ASTM-D16-07—Standard Terminology for Paint, Related Coatings, Materials, and Applications
MIL-C-17504B(2)—Coating Compound (Acrylic Clear)
MIL-C-83466 NOT-1—Polyurethane Coatings for Aircraft Applications
MIL-C-85522B(2)—Elastomeric Polyurethane Coating for Rain-Erosion
MIL-DTL-24631—(1C, 2B, 3B) Epoxy Paint for Navy Coating Formulas
MIL-HDBK-808—Finishing for Protective Ground Support Equipment
MIL-HDBK-1110/1—Handbook for Protective Coatings for Facilities
MIL-HDBK-1884—Plasma Spray Coating Deposition
MIL-P-14105D—Heat-Resistant Paint for Steel Surfaces
MIL-P-85089A—Painting Aircrew Escape Propulsion Systems
MIL-PRF-6799K—Sprayable, Strippable Coatings
MIL-PRF-19565C(1)—Coating Compounds (Thermal Insulation)
MIL-PRF-22750F—Coating Epoxy, High Solids
MIL-PRF-24712A(1)—Powder Coatings
MIL-PRF-32239—Coating Systems, Advanced Aerospace Applications
MIL-PRF-81352C—Aircraft Touch-up
MIL-PRF-85285D(1)—Polyurethane Coating for Aircraft & Support Equipment
MIL-STD-7179—Finishes, Coatings to Protect Aerospace Weapons Systems
TT-C-490E—Chemical Conversion Coatings & Pretreatments for Ferrous Surfaces, Base for Organic Coatings
TT-P-2756A—Polyurethane Coating, Self Priming Top Coat (Low VOC)

COBALT ALLOYS
MIL-C-24248B(1) NOT 1—Cobalt Alloy Castings, Wear- and Corrosion-Resistant
MIL-C-24252D—Cobalt Chromium Alloy Bars & Forgings
MIL-C-24689B—Cobalt Alloy Castings (Wear, Corrosion-Resistant)

COPPER
ASTM-B281-88(2001)—Standard Practice for Preparation of Copper and Copper-Base Alloys for Electroplating and Conversion Coatings
MIL-C-16555D—Coating Compounds (Strippable, Sprayable)
MIL-C-24679—Copper Nickel Alloy Forgings
MIL-F-495E(1) NOT 2—Chemical Finish for Black, Copper Alloys
CORROSION PREVENTION, COMPOUNDS

AMS3116A—Primer Coating: Epoxy, Chemical and Solvent Resistant Non-Chromated, Corrosion Preventive

AMSC27725A—Coating: Corrosion Preventive, Polyurethane for Aircraft Integral Fuel Tanks for Use to 250 Mdf (121 Mdc)

MIL-C-11796C—Corrosion Preventive Compound (Hot Application)

MIL-HDBK-729 NOT 1—Corrosion & Corrosion Prevention Metals 850

MIL-HDBK-46164 NOT 1—Sealing & Coating Compounds (Corrosion Inhibitive)

GOLD


MIL-DTL-45204D—Gold Plating (Electrodeposited)

IRON OXIDE

MIL-I-85370—Iron Oxide, Yellow (Monohydrate)

MAGNESIUM ALLOYS

AMS2466A—Hard Anodic Coating of Magnesium Alloys Alkaline Type, High Voltage


ASTM-B893-98(2003)—Specification for Hard-Coat Anodizing of Magnesium for Engineering Applications

ASTM-D1732-03—Standard Practices for Preparation of Magnesium Alloy Surface for Painting

MIL-HDBK-305 NOT 1—Alloy for Temper Designation System

MIL-HDBK-693A NOT 1—Magnesium & Magnesium Alloy

MIL-M-46130(1) NOT 1—Magnesium-Lithium Alloy Plate, Sheet, & Forgings

MOLYBDENUM & MOLYBDENUM ALLOYS

ASTM-B629-77(2003)—Standard Practice for Preparation of Molybdenum and Molybdenum Alloys for Electroplating

Nickel & Nickel Alloys


ASTM-B558-79(2003)—Standard Practice for Preparation of Nickel Alloys for Electroplating

ASTM-B733-04—Standard Specification for Autocatalytic (Electroless) Nickel-Phosphorus Coatings on Metal

MIL-C-24615A—Nickel Chromium-Columbium Alloy

MIL-C-24723—Nickel Copper Alloy Castings

MIL-DTL-23229E—Nickel Chromium Iron Alloy Bars & Forgings

MIL-DTL-32119—Electroless Nickel Coatings

MIL-HDBK-506—Process for Coating Chrome Aluminide

MIL-N-24106C & MIL-N-24549B(1)—Nickel-Copper Alloy Bars, Rods, & Forgings

MIL-N-24271A NOT 1—Nickel-Chromium-Iron Alloy Castings

MIL-N-24390B(1) NOT 1—Nickel Molybdenum Chromium Iron Sheet & Low-Carbon, Low-Silicon Nickel Molybdenum-Chromium-Iron Plate

MIL-P-27418 NOT 3—Plating of Soft Nickel (Electrodeposited, Sulfamate Bath)

MIL-P-18317—Plating of Black Nickel on Brass, Bronze, or Steel (Plated)
PALLADIUM
ASTM-B679—Plating w/Palladium (Electrodeposited)

PHOSPHATE COATINGS
MIL-DTL-16232G—Phosphate Coating: Heavy, Manganese or Zinc Base
MIL-HDBK-205A—Phosphatizing and Black Oxide Coating of Ferrous Metals

PLATING ON PLASTICS
ASTM-B727-04—Standard Practice for Preparation of Plastics Materials for Electroplating

RHODIUM

SILVER

STEEL
ASTM-B912-02—Standard Specification for Passivation of Stainless Steels Using Electropolishing
MIL-C-24637—Corrosion-Resistant Steel Castings (Martensitic)

TESTING
ASTM-B117-07a—Standard Practice for Operating Salt Spray Apparatus (Accelerated Corrosion Test)
ASTM-B489-85(2003)—Standard Practice for Bend Test for Ductility of Electrodeposited and Autocatalytically Deposited Metal Coatings on Metals
ASTM-B839-04—Standard Test Method for Residual Embrittlement in Metallic Coated, Externally Threaded Articles, Fasteners, and Rod—Inclined Wedge Method
ASTM-B905-00(2005)—Standard Test Methods for Assessing the Adhesion of Metallic and Inorganic Coatings by the Mechanized Tape Test
ASTM-D609-00(2006)—Standard Practice for Preparation of Cold-Rolled Steel Panels for Testing Paint, Varnish, Conversion Coatings, and Related Coating Products
ASTM-D2201-99—Standard Practice for Preparation of Zinc Coated & Zinc Alloy Coated Steel Panels for Testing Paint
ASTM-D2369-07—Standard Test Method for Volatile Content of Coatings
ASTM-D3322-82(2005)—Standard Practice for Testing Primers and Primer Surfacers Over Preformed Metal
ASTM-D5065-07—Standard Guide for Assessing the Condition of Aged Coatings on Steel Surfaces
MIL-HDBK-728/1 NOT 1—Non-Destructive Testing

THINNER
MIL-T-81772B(1)—Requirements for Three Types of Thinner to be Used in Reducing Aircraft Coatings

TIN & TIN ALLOYS

TITANIUM & TITANIUM ALLOYS
MIL-HDBK-697A NOT 1—Finishing Titanium & Titanium Alloys

TUNGSTEN & TUNGSTEN ALLOYS
ASTM-B481-68(2003)e1—Standard Practice for Preparation of Titanium and Titanium Alloys for Plating
ASTM-B482-85(2003)—Standard Practice for Preparation of Tungsten and Tungsten Alloys for Electroplating

ZINC & ZINC ALLOY
AMSC81562—Zinc Coatings (Mechanically Deposited)
MIL-C-17711B—Chromate Coatings for Zinc Alloy Castings & Hot-Dip Galvanized Surfaces

*Active documents as of 11/1/12. Inactive specifications are omitted; superseding files for cancelled documents are noted where applicable. To download full PDFs, or to view a complete listing of specifications, visit the Department of Defense Index of Specifications at https://assist.daps.dla.mil/online/start/; www.sae.org for AMS Standardss; or www.astm.org for ASTM documents.