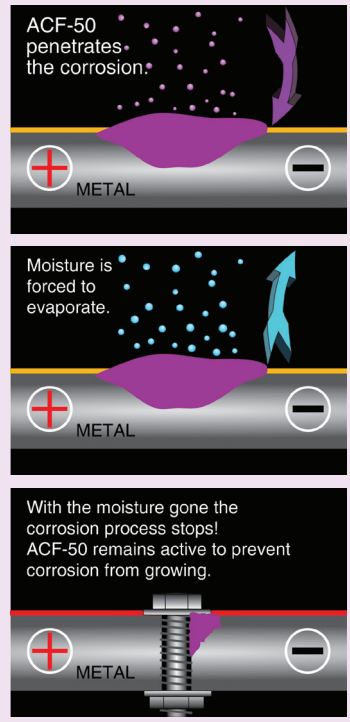
ANTI CORROSION FORMULA

ACF-50 Technical Data

ACF-50, Anti Corrosion Formula, is a state of the art anti-corrosion lubricant compound, specifically designed for the Aero Space Industry. ACF-50's unique chemistry offers excellent penetration, coupled with an unmatched 24 months of "active" corrosion protection.

Designed specifically to perform as both a Corrosion Inhibiting Compound (CIC) and a Corrosion Prevention Compound (CPC). ACF-50's blend of non-flammable, non-toxic, polar bonding inhibitors and moisture-displacing additives penetrate deep into corrosion cells to actively remove electrolytes. No longer in contact with the metal surface, these electrolytes evaporate. ACF-50's resulting dielectric fluid film acts as an "off-switch" for the corrosion process.

- Complete anti-corrosion solutions for airframe, avionics and ground support equipment.
- Significantly reduces corrosion events in both Structure & Avionics.
- Ultra Thin Film promotes weight reduction, improving payload capacity.
- ACF-50 is blended utilizing superior quality control ISO 9002 standards and has an excellent customer satisfaction record with a 0.0% return rate.
- Removal not required for re-application, creates no HAZMAT residue.
- ACF-50 is Non-Toxic according to EPA / OSHA standards.
- VOC compliant world wide.



ACF-50 Applications

FUSELAGE • STABILIZERS • AVIONICS • MICRO SWITCHES CANNON PLUGS • ANTENNA MOUNTS

Single Engine & Light Twins
Spray into: wing sections, hinges, teleflex cables, air vent cables, trim cables, throttle cables, battery boxes, engine compartments

Rotorwing Aircraft
Spray into: tail boom section, engine gear, air vent cables, rotor head, grip areas. Spray or wipe on blades.

Cargo & Regional Airlines
Spray into: wing sections, landing gear compartments, cargo door, brackets, garbage chutes, galleys, lavatory areas, belly skin sections, main spar sections, seat tracks.

Float Equipped & Amphibious
Spray into: floats, wing sections, bilge area, exterior of motors, connectors.

Turbo Props / Business Jets
Spray into: trim drum actuators, landing gear and compartments, wheel hubs, thrust reverse mechanisms. Wipe on nacelles.

LEAR CHEMICAL RESEARCH CORPORATION
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PROVEN PROTECTION FOR OVER 30 YEARS

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ACF-50®
ANTI CORROSION FORMULA

Prevents and Deactivates Existing Corrosion

ACF-50 Corrosion Abatement Procedure 2024-T3 Aluminum Fogged in a Sulfurous Acid/Salt for 192 hours

Panels pretreated with ACF-50 showed an average weight loss of only **1.9 mg**.

Conclusion:
ACF-50 prevents the formation of new corrosion cells.

Untreated panels showed and average weight loss of **150.1 mg**.

Conclusion:
Untreated panels corrode rapidly.

Untreated panels exposed for 96 hours, then treated with ACF-50 and exposed for an additional 96 hours showed a loss of only **69.8 mg**.

Conclusion:
ACF-50 stops the corrosion process on contact.

ACF-50 Performance Qualified

MIL-PRF 81309

CHARACTERISTICS / REQUIREMENTS	RESULTS
- Minimum flash point / 60°C (140°F)	Conforms / 175°F
- Synthetic Sea Water Displacement / No visible corrosion	Conforms
- Removability / Not more than 3 cycles to remove	Conforms
- Abrasives / Not present	Conforms
- Maximum Film Thickness / Type II: 0.0005 inches	Conforms
- Sprayability / Sprayable	Conforms
- Corrosivity / No visible corrosion	Conforms
- Staining / No visible evidence of staining	Conforms
- Minimum Dielectric Breakdown / 25,000 volts	Conforms / 38,000 volts
- Mixability of Compounds / No evidence of separation	Conforms
- Lubricity of Compounds / Less than 0.20	Conforms
- Effect on Electric Components / No change	Conforms
- Effect on Electric Connectors / No increase in resistance	Conforms

Commercial Aircraft Test Approvals

TEST IDENTITY	TEST METHOD	RESULTS
Airbus Industrie TNA 007.10138	- **Corrosion Resistance To:** Turco Toilet Fluid, Orange Juice, Coke, Coffee, De-Icing Fluid 3:4-1:2-1:4, %5 NaOH, %5 HCl, 5% HNO^3, %10 CH^3COOH, %45 Ethanol	
BMS 3-23E Table II	- Corrosion Inhibiting Charactertistics **MIL-C-1617D / ASTM G34**	Pass
BMS 3-23E Table II	- Water Displacement Ability / **MIL-C-1617D**	Pass
BMS 3-23E Table II	- Functional Penetration Test	Pass
Douglas Aircraft CSD #1	- Immersion Corrosion Test / **ASTM F 483**	Conforms
Douglas Aircraft CSD #1	- Sandwich Corrosion Test	Conforms
Douglas Aircraft CSD #1	- Painted Surfaces / **ASTM F 502**	Conforms
Douglas Aircraft DMS 2150	- Salt Fog Exposure/ **ASTM B 117**	Conforms
Douglas Aircraft DMS 2150	- Viscosity / **ASTM D 445**	Conforms
MISC.	- Humidity Resistance / **AMS 3066B**	Conforms
MISC.	- Polymide Insulated Wire / **MIL-C-87937B**	Conforms

ACF-50 OEM Engine & Airframe Approvals

BOMBARDIER
DASH 8 100-300
Corrosion Preventative Compound
Electrical System - SYD-8-20-001
Structural AMM-51-31-00 REF 13-16
BAMS 565-006 TYPE III

ATR REGIONAL TRANSPORT • ATR 42-72
Corrosion Protection
Ref. JIC-122351-PRO-10 000

BAE SYSTEMS • BAE 146-100
Corrosion Preventative Compound
Material Spec 89/042

EMBRAER / EM RJ 130-145
Periodic Lubrication of Landing Gear
SNL 145-32-0035 Nov/2008

HAWKER-BEECHCRAFT / BEECH 1900C-D
Corrosion Control
Manual 114-590021-197

AEROCOMMANDER • AIR TRACTOR • BOEING HELICOPTER • BELL HELICOPTER TEXTRON • BRITISH AEROSPACE • CANADAIR • CESSNA • CIRRUS • CONCORDE BATTERY • ENSTROM ERICKSON • EXTRA AIRCRAFT • GE ENGINES • GULFSTREAM AEROSPACE • HILLER AIRCRAFT • LAKE AIRCRAFT • LOCHEED MARTIN • MCDONNELL DOUGLAS CORP MD HELICOPTER MOONEY AIRCRAFT • PILATUS AIRCRAFT • PIPER • PRATT & WHITNEY • ROBINSON • ROLLS ROYCE • SAFRAN ENGINES • SIKORSKY • SCHWEIZER • VAN AIRCRAFT • WIPAIRE

ACF-50 Health & Safety

Scan QR code for Safety Data Sheet
Operators should use standard safety precautions when using ACF-50.
Refer to Safety Data Sheet for complete health and safety information.

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