

# NAV GUARD<sup>TM</sup>

MIL-PRF-81309H

ADVANCED CORROSION PREVENTIVE COMPOUND, WATER DISPLACING, ULTRA-THIN FILM

## PRODUCT HIT POINTS

- Qualified under MIL-PRF-81309H Type IV Advanced Corrosion Preventive Compound
- Qualified under MIL-PRF-81309H Type II Airframe and General Purpose Grade
- Newly developed polymeric film technology for superior resistance to corrosive chemicals
- U.S. Navy tested to be over 3X more effective than commercially available corrosion prevention products
- Foggable film for easy and thorough application without adding appreciable weight to airframes
- Ultra-thin, self-healing film won't attract dust and dirt and won't interfere with the ability to inspect internal surfaces
- Unsurpassed high performance multi-metal protection – combats degradation of ferrous metals, aluminum, magnesium and their alloys
- Eliminates anodic and cathodic corrosion and shields against the diffusion of corrosive agents
- Safe on electronics and avionics

## DESCRIPTION

NavGuard was developed to fulfill the need of the U.S. Navy for a longer lasting and more robust Corrosion Prevention Compound (aka 'CPC' in military parlance) suitable for extended operations in extreme marine environments and for protecting corrosion prone components. The new polymeric CPC film technology developed for NavGuard was found to last longer than currently used military grade CPC systems, which translates into fewer CPC treatments on aircraft, thereby reducing downtime and maintenance costs and extending the lifecycle of aircraft. NavGuard was developed in accordance with MIL-PRF-81309 (Corrosion Preventive Compounds, Water Displacing, Ultra-Thin Film) and far exceeds those specification requirements. For example, NavGuard lasted three times longer than the 14-day neutral salt fog (ASTM B117) requirement for aluminum panels. In side-by-side tests with other CPC products, NavGuard outperformed commercially available competitors by a factor of three or more on aluminum and steel, and is expected to excel equally on magnesium, ferrous alloys and other corrosion-sensitive surfaces.



## SUGGESTED APPLICATIONS

Corrosion prevention and control for military, commercial and private rolling, floating and flying stock • Protection of metal surfaces exposed to corrosive chemical environments

- Short-term outdoor or long-term indoor protection for metal parts when surfaces can be re-coated periodically
- Transport and storage coating for metal products and parts
- Protection of metals exposed to corrosive chemical environments
- Battery terminals, electrical and avionic components such as micro switches, cannon plugs, antenna bases, circuit breakers and buss bars





**PROPERTIES**

**Appearance:**  
**Physical State:**  
**Odor:**  
**Color:**  
**Viscosity:**  
**pH:**  
**Boiling Point/ Range:**  
**Melting Point:**  
**Flash Point:**  
**Method:**  
**Upper Explosive Limit, vol %:**

Transparent  
 Non-viscous liquid  
 Hydrocarbon  
 Amber/Lt. Brown  
 Not established  
 Not applicable  
 > 450°F / 232°C  
 Not established  
 > 60°C / > 140°F  
 Cleveland Open Cup  
 5.3

**Lower Explosive Limit, vol %:**  
**Autoignition Temperature:**  
**Percent Volatile by volume:**  
**Vapor Density (Air=1) :**  
**Evaporation Rate (BuAc=1) :**  
**Vapor Pressure, mmHg @23 °C:**  
**Solubility in water:**  
**Octanol/Water Partition:**  
**VOC Content (g/l) (%):**  
**Specific Gravity @15.6 °C:**  
**Pour Point:**  
**Percent non-volatile by Volume:**

0.7  
 Not established  
 51.5  
 >1  
 <0.01  
 >1 mmHg  
 Insoluble  
 Not established  
 552 (51.5)  
 0.871  
 -22°F / -30°C  
 48.5

**PRODUCT CODES**

Part Number	UPC Code	Product Description
30302	761866 30302 4	16 oz aerosol
30403	761866 30403 8	1 quart
30404	761866 30404 5	1 gallon
30405	761866 30405 2	5 gallon
30408	761866 30408 3	55 gallon

