



## EMS Protect-All

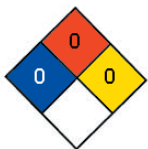
CONCENTRATED, WATER-BASED PROTECTANT

- Prevents Rust
- Non-Staining
- UV Protection
- Safe on Leather
- Safe on Wood
- Non-Yellowing
- Apply Every 45 Days

Protect-All is a concentrated, water-based formula that will protect equipment from harsh elements for up to 45 days between applications.

Our formulation not only protects painted surfaces and equipment, it is safe to use on vinyl, plastic, tires, dashboards and soft tops. It's even great for leather and treated wood. Protect-All is non-staining and will not yellow over time and exposure to sun.

Simply spray, brush, mop or wipe on, then dry with a soft cloth. Once Protect-All has penetrated into the surface or material, it blocks out moisture, ozone, ultraviolet rays and oxidation. And as part of a regular maintenance program aids in the prevention of rust.



## Technical Data

NITRATE LEVEL: **0% - None**  
FORM: **Liquid**  
ODOR: **Odorless**  
COLOR: **Milky White**  
DETERGENCY: **None**  
TOXICITY: **Non Toxic**  
WETTING ABILITY: **Excellent**  
STORAGE STABILITY: **3 Years+**  
COLD STABILITY: **29° F**

SHIPPER REGULATIONS: **None**  
FLASH POINT: **None**  
BOILING POINT: **212° F**  
SOLUBILITY IN WATER: **100%**  
BIODEGRADABLE: **Yes/100%**  
VOLATILE BY VOLUME: **N/A**  
CARCINOGENS: **None**  
VISCOSITY: **Medium**  
EVAPORATION RATE: **Slow**

## Common Uses

Protect-All can be used in any environments on a huge variety of surfaces.

### Uses

Paint Finishes  
Chrome  
Equipment Parts  
Hoses  
Plastic  
Plexiglas  
Leather  
Vinyl

## Metal Studies

Dept. of Transportation (D.O.T.) Test Protocols as per Section 173.154  
Exceptions for Class 8 (corrosive materials): The material being tested must be proven to be non-destructive or not to cause irreversible alterations in human skin tissue. Testing was conducted on an albino rabbit.

**Conclusion:** Protect-All proven to be NON-DESTRUCTIVE on human skin tissue.

**Metal Test Limits:** D.O.T. Classifies a material to be CORROSIVE if it has a corrosion rate that exceeds 6.25 mmpy on SAE C1020 carbon steel.

Results of Protect-All: SAE 1020 carbon steel = 0.00 mmpy

**Conclusion:** Protect-All is NON-CORROSIVE

## Use Specifications

Please refer to the product label.

## Toxicity Studies

**Toxicity Limits: Test Procedure OECD 202, 48 hr.**  
LC 50 and LD 50 (rat oral) found to be NON-TOXIC

**Mutagenicity Limits: OECD Guidelines Sec. 471 Chemicals**  
Protect-All was found NOT TO BE MUTAGENIC

### Dermal Irritation & Corrosion Test

A modified Draize method was used as described in OECD Guidelines for the Testing of Chemicals Sec. 404 and complies with the requirements of OECD Principles of GLP, Annex revised as of July 1992.

Protect-All received a Primary Irritation Score of 0.2 +/-0.1 and is classified as a "Non-Skin Irritant"

### Biodegradation & Aquatic Safety

Test Procedure: Hach Reactor Digestion method for Waste Water and Sea Water. Hach Reactor Digestion Method is a semi-micro adaptation of the Standard Methods.

Test Results Conclude Protect-All was found to be 100% Biodegradable

### Ecological Safety

96 hr LC50: Flathead Minnow >500 mg/l = Non-Toxic  
96 hr LC50: Bluegill >16 mg/l = Non-Toxic  
96hr LC50: Rainbow Trout >16 mg/l = Non-Toxic

## Classifications & Approvals

**D.O.T., TDG, IMO, IATA, IMDG, SARA 313 311/312, California Prop 65**  
NON-Regulated

### FDA

Approved as Safe (GRAS) (CGMP) CFR 184.1923

### USDA Authorization

A1, A2, A8, C1, H1, H2

### Mil Spec

Mil-PRF-87937  
Mil-PFR-87937D

Additional Studies & Results: When tested, Protect-All showed no potential for the generation of Carbon Dioxide under NIOSH 7903, OSHA & ACGIH testing protocols governing workplace environments.