

# Product Data

# Nox-Rust® 5400

## Rust Preventive Oil with Petroleum Additives

### Description

Nox-Rust 5400 is a petroleum-based sheet metal processing lubricant and preservative for use on coiled stock as a combination corrosion preventive and pre-lube. It is also used in blankers (auto-shear) as a wash which leaves behind a lubricant and corrosion preventive film, and as a rust preventive spray on steel and steel parts. Approved for use as a preservative and lubricant on sheet and coiled steel for both Ford and General Motors as it is non-interfering with body and assembly sealers, adhesives, and cleaning systems.

### Features



#### **Proven Daubert Cromwell corrosion inhibitor chemistry**

- Proven to protect steel surfaces in severe environmental conditions and high humidity.
- OEM approved
- Compatible with Daubert Cromwell corrosion inhibitor papers, films and emitters
- Available in pails, drums, and aerosol cans.

### Typical Applications



#### **Performance Protective Properties**

**Acid Atmosphere Test:** Nox-Rust 5400 will protect cold rolled steel from stain or corrosion for min. 16 hours exposure to a 25 ppm HCl atmosphere. Test method: Ford Motor Company BJ7-6.

**Condensing Humidity Test:** It will protect cold rolled steel from corrosion for a minimum of 72 hours exposure in the Cleveland Condensing Cabinet. Test Method: Ford Motor Co. BJ7-7.

#### **Humidity Cabinet (100°F/100% RH) on:**

Cold Rolled Body Steel, 500 hrs., no stain or corrosion  
One Side Zincrometal, 500 hrs., no stain or corrosion  
Galvanized, Two Side, 500 hrs., no stain or corrosion  
Galvanized, One Side, 500 hrs., no stain or corrosion

#### **Stack Tests:**

Cold Rolled Body Steel, 500 hrs., no stain or corrosion  
Galvanized Two Side, 500 hrs., no stain or corrosion  
Zincrometal, 500 hrs., no deterioration of zincrometal

**Procedure:** Zincrometal unpolished cold rolled steel and galvanized panels are coated to a coating thickness of 0.5 mil. Panels are then stacked and clamped to form a tight bundle. Bundles are then exposed to 100% relative humidity at 100° F. for 500 hours.

#### **Atmospheric Testing:**

Cold rolled steel panels, coated to a 0.5 mil film thickness, hung in an industrial warehouse environment, showed no signs of corrosion, stain or varnish after 9 months. Experience in several stamping plants, using Nox-Rust 5400 as a forming lubricant, has shown that only the residual Nox-Rust 5400 protected formed parts for more than 3 months under high humidity storage conditions, without any signs of rust, stain, or varnishing.

#### **Surface Preparation and Application**

Metal surface should be clean, dry and free of rust, oil and mill scale. Recommended metal substrate temperature is 50-95°F (10-35°C) at the time of application. Apply by brush or spray. Use as supplied. Do not thin. Incorrect thinning will affect film build, dry time and product performance. Allow adequate ventilation for proper cure. Consult the SDS for handling and first aid information.

### Removal

Easily removed with conventional cleaning methods. Removability and compatibility with phosphating systems: Material is easily removed during phosphate wash operations and has no adverse effect on subsequent priming, painting or welding operations.

# Product Data

# Nox-Rust® 5400

## Rust Preventive Oil with Petroleum Additives

### Physical Data

Physical Properties	Typical Values
Color	Amber
Application	Dip, spray, brush or roller coat
Coverage	3,000 ft <sup>2</sup> /gal (73 m <sup>2</sup> /l)
Removal:	Easily removed with conventional cleaning methods.
Film Type	Oily, non-drying
Specific Gravity @ 77°F (25°C)	0.890
Weight per Gallon	7.4 lbs.
Flash Point (COC)	248°F minimum
Viscosity SUS @100°F	81
Film Thickness (mils)	0.5
VOC (lbs/gal)	2.45
Pour Point	Less than 15°F
Length of Protection	
Outdoor Storage (uncovered)	3-6 months
Indoor Storage	1-2 years

### Approvals Specifications

RoHS 2 compliant  
**Automotive Specifications:**  
Approved, Gen. Motors 998-1833; Ford Motor Co. M4B90A.

### Storage

Store at temperatures between 50-95°F (10-35°C). Mild agitation is recommended prior to use.

### Shelf Life

12 months from date of shipping, stored in the original shipping container used by Daubert Cromwell and not in high humidity and not at high temperatures, or stored outside. Store unused product in a cool, dry place, away from direct sunlight. Storage outside these conditions voids this statement.

### Note

The addition of any product over or under this coating is not recommended. The use of additional coatings could result in chemical incompatibility, thus adversely affecting the performance of this coating. If a product other than Daubert Cromwell's recommended product is required, written authorization must be obtained from Daubert Cromwell.

**WARRANTY** The data, statements and recommendations in this product specification sheet are based on testing, research and other development work, which has been carefully conducted by us, and we believe such data, statements and recommendations will serve as reliable guidelines. Physical properties shown above represent typical values and are not intended for use in writing specifications. However, this product is subject to numerous uses under varying conditions over which we have no control, and accordingly, we do NOT warrant that this product is suitable for any particular use. Users are advised to test the product in advance to make certain it is suitable for their particular production conditions and use. All products manufactured by us are warranted to be first class material and free from defects in material and

workmanship. Liability under this warranty is limited to the net purchase price of any such products proven defective or, at our option, to the repair or replacement of said products upon their return to us transportation prepaid. All claims on defective products must be made in writing within 30 days after the receipt of such products in your plant and prior to further processing or combining with other material and products. We make no warranty, express or implied, as to the suitability of any of our products for any particular use, and we shall not be subject to liability from any damages resulting from their use in operations not under our direct control. This warranty is exclusive of all other warranties, express or implied, and no representative of ours or any other person is authorized to assume for us any other liability in connection with the sale of our products.



**DAUBERT CROMWELL**  
The Leading Name in Corrosion Prevention®

12701 S. Ridgeway Ave | Alsip, IL 60803 USA | (800) 535-3535  
Tel +1 (708) 293-7750 | E-mail: [info@daubertcromwell.com](mailto:info@daubertcromwell.com) | [www.daubertcromwell.com](http://www.daubertcromwell.com)

Rev. AUG 2017 SMD

