

# TECHNICAL DATA SHEET.

## 1. IDENTIFICATION OF PRODUCT AND COMPANY

- 1.1 Product name : **NAVY STEEL**  
Water based rust converter / primer
- 1.2 Company : **D. Adam & Associates / ACTEL Coatings**  
**Clarendon, 17 High Cross Avenue, Melrose TD6 9SQ Scotland**  
Tel: +44 (0) 7880 805478 E: [dougadam@globalnet.co.uk](mailto:dougadam@globalnet.co.uk)  
<http://www.navysteel-rust-converter.co.uk/>

## 2. TECHNICAL DATA

- 2.1 **STORAGE:** Protect from freezing.
- 2.2 **APPLICATION:** Apply one or two coats by spray, brush or roller.
- 2.3 **OVERCOATING:** 8 hours if overcoating with a water based product. Allow a minimum of 24 hours if overcoating with solvent based materials.
- 2.4 **DRYING TIME:** 2 to 4 hours, very dependent on the drying conditions.  
Full reaction time 24 hours.
- 2.5 **COVERAGE:** Theoretical - up to 12 sq. Metres per litre.  
Practical - 10 sq. Metres per litre.
- 2.6 **PACK SIZE:** 25 litre or 200 litre drums.
- 2.7 **DRY FILM:** 25 microns.
- 2.8 **FLASH POINT:** None.
- 2.9 **FIRE RESISTANCE:** Tested to Class "O" BS 476 Parts 6 & 7 - Passed
- 2.10 **TOXICITY:** Non toxic. Approved for use in food and drinks manufacturing plants by Departments of Agriculture for Canada and The United States

## 3. PREPARATION

- 3.1 **Navy Steel** is supplied ready to use. Stir well before use. **DO NOT THIN.**
- 3.2 When using **Navy Steel**, always decant into a separate container and never return surplus material to the original container.
- 3.3 Surfaces should be clean and free from surface dirt, dust and grease. Light to medium rusted steelwork must be properly prepared by wire brush or power tools (SSPC.SP3) to remove loose millscale and flaky rust and paint, which is not sound or tightly adhered.
- 3.4 Weathered steel should be high pressure water or wet abrasive blasted to SSOC-SP6.
- 3.5 Best results are achieved if some bright metal (10%) is showing in the rusted area.
- 3.6 Apply **Navy Steel** when the humidity is greater than 40%.
- 3.7 On warmer days it is recommended to damp down warm steel with a mist of water prior to application.

#### 4. **APPLICATION**

- 4.1 **Navy Steel** should be stored at room temperature (20°C/68°F) for 24 hours before use. Best applied by brush or deck scrubber to encourage penetration of rusted surfaces, but **Navy Steel** can also be applied by spray or roller.
- 4.2 Apply **Navy Steel** when the air and surface temperatures are between 5°C and 30°C and the relative humidity between 40-90%.
- 4.3 Thin, even coats applied by brush is the preferred method of application. Brush **Blue Steel Primer** well into the rust to leave a dry film thickness of 25-30 microns.
- 4.4 **Navy Steel** in the wet state is off white in colour. The changing colour of the coating indicates that the chemical reaction is taking place. After treatment with **Navy Steel**, the overall area should be navy/black in appearance. If this is not the case, insufficient surface preparation has been carried out.
- 4.5 **Navy Steel** will normally be touch dry within 2 hours depending on the temperature and humidity. Cooler temperatures delay curing. Allow a minimum of 8 hours before overcoating with water based products and 24 hours with solvent based topcoats.
- 4.6 Wash brushes and equipment with water immediately after use. Clean spray lines before **Navy Steel** dries. Once dry, **Navy Steel** is difficult to remove. Use an aromatic solvent to soften dry brushes or free clogged lines.

#### 5. **HEALTH AND SAFETY**

These products are considered to be non hazardous. However, please ensure that operators read and understand the health and safety data sheet before using these materials.

Revised May 1999