

# Technical Data Sheet



**HAVILAND  
PRODUCTS CO.**

## **ANOKLEEN #2-S**

### **Low-Foaming Heavy Duty Electrocleaner for Steel**

**ANOKLEEN #2-S** is a special low-foaming electrocleaner which provides high conductivity, general purpose anodic electrocleaning for steel. In addition to its excellent cleaning, activating, and non-smutting properties, **ANOKLEEN #2-S** maintains a light foam blanket over the surface of the tank to prevent misting and fuming. The low phosphate content allows for easy treatment and disposal of spent solutions.

#### **OPERATING PARAMETERS**

Concentration	8 - 12 oz/gal
Temperature	170 - 200°F
Time	1/2 - 3 minutes
Current Density	50 - 100 amp/sq ft
Tanks, Coils and Electrodes	Steel
Voltage	6 - 10 v

#### **BATH PREPARATION**

The process tank should be filled 2/3 full with water and heated to 110 - 130°F. The required amount of **ANOKLEEN #2-S** should then be slowly added with good agitation to dissipate the heat that is produced on dissolving and to prevent settling. The tank should then be filled and heated to operating levels.

#### **CONTROL**

1. Pipette 10 ml of the cleaning solution and add 30 mls of water.
2. Add 8 to 10 drops of Methyl Orange indicator.
3. Titrate with 1.0N Hydrochloric Acid (HCl) to a red endpoint.
4. Calculation:  
$$(\text{mls HCl titrated}) \times (\text{N HCl}) \times 0.7 = \text{oz/gal of ANOKLEEN \#2-S}$$

#### **SAFETY AND HANDLING**

**ANOKLEEN #2-S** is a highly alkaline material and can cause severe burns on contact with skin and eyes. Avoid inhaling dust. Wear protective clothing such as gloves, aprons and goggles when handling. In case of skin contact, flush exposed area with clean water for 10 to 15 minutes. For eye contact, flush with clean water for 15 minutes then contact a physician.

#### **NON-WARRANTY**

The data contained in this bulletin is believed by HAVILAND PRODUCTS COMPANY to be accurate, true and complete. Since however, final methods of use of these products are in the hands of the customer and beyond our control, we cannot guarantee that the customer will obtain the results described in this bulletin, nor can we assume any responsibility for the use of this product by the customer in any process which may infringe the patents of third parties.