

Technical Data Sheet



**HAVILAND
PRODUCTS CO.**

ADR #1

Steel Soak and Electro Cleaner and Alkaline Descaler

ADR #1 is formulated to cover most steel cleaning and descaling operations. **ADR #1** is used for light to heavy-duty soak cleaning, anodic or cathodic electrocleaning as well as being an outstanding alkaline descaler. **ADR #1** is an ideal soak cleaner prior to plating or phosphating. Unlike most electrocleaners it may be used to remove heavy soils, therefore not requiring a presoak in many cases. **ADR #1** can remove heavy rust, carbon smut, oxides, scale, weld discoloration and many paints and powder coats from steel and stainless steel.

ADR #1 is a versatile cleaner/descaler, it can be used on critical parts that cannot tolerate hydrogen embrittlement normally associated with acid pickles. In addition, there is no chemical attack as with conventional acid treatments. Its powerful penetrating action allows rapid removal of rust and scale along with the removal of drawing and stamping compounds, rust preventative oils, shop soils and metal forming lubricants.

OPERATING PARAMETERS

ADR #1, an entirely new chemical concept for soil, oil, dirt and scale removal, is readily soluble in all recommended use concentrations. Although it may be used at all temperatures and at all concentrations, a guide is offered. A steel tank with heating apparatus is also recommended.

<u>Use</u>	<u>Concentration</u>	<u>Temperature</u>
Soak	4 - 8 oz/gal	150°F or greater
Electroclean	4 - 10 oz/gal	140°F or greater
Heavy Duty Soak	8 - 16 oz/gal	160°F or greater
Alkaline Derust	16 - 48 oz/gal	180°F or greater
Paint Stripper	16 - 48 oz/gal	180°F or greater

ANALYTICAL PROCEDURE FOR CONTROL

1. Pipette 10 ml sample of solution in a 250 ml erlynmeyer flask.
 2. Add 8 to 10 drops of Methyl Orange indicator.
 3. Titrate with 1.0N Hydrochloric Acid (HCl) to a red end point.
- Calculate (ml HCl titrated) x (N HCl) x 0.81 = oz/gal **ADR #1**

SAFETY AND HANDLING

ADR #1 contains caustic soda which is very corrosive to body tissue. Wear gloves, protective clothing and face shield. Avoid breathing of dust that could be generated on handling. **ADR #1** should be added slowly and carefully when making solutions.

WASTE DISPOSAL

Solutions and rinse waters of **ADR #1** are alkaline and therefore the pH of the solution must be adjusted to local ordinance standards before disposal.

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.