

## MAGNAVU<sup>®</sup> ALKALINE CLEANER DIP FORMULA

### GENERAL DESCRIPTION

MAGNAVU<sup>®</sup> is an alkaline cleaner formulated to meet major specifications, to have optimum performance at a minimum concentration, and to be "Environmentally Friendly."

MAGNAVU<sup>®</sup> Cleaner has been tested in both the pre-cleaning and post-cleaning phases of NDT. It was determined that if a part is thoroughly rinsed after cleaning, it will have no effect on the processing of the part. If a part is not rinsed prior to processing, it can affect the ability to find the defect and the brightness of the indications.

### COMPOSITION

MAGNAVU<sup>®</sup> is comprised of alkaline builders, surfactants, a corrosion inhibitor, a pH adjuster, and a coupler. MAGNAVU<sup>®</sup> is available in both dip formula and spray formula for all application needs.

### TYPICAL PROPERTIES (not a specification)

Dip Formula	
Color	Blue
Odor	Mild
Ph	11.5
Total Alkalinity	2.5%
% Active	18.5%

### CONCENTRATION VERIFICATION

#### HACH Alkalinity Titration Kit\*

Titration	<b>0.5N Sulfuric Acid</b>
Indicator	<b>Bromcresol Green-Methyl Red</b>
Concentration %	<b>Titration drops × 1.40</b>

\* Ordering info: **Alkalinity Test Kit, Model AL-TA**; Product # **2314500**; Mfr. **Hach Company**; Website [www.hach.com](http://www.hach.com)

**BATH PREPARATION & TANK LIFE**

To keep foaming to a minimum when preparing a tank of MAGNAVU<sup>®</sup> cleaner, begin by first charging the tank with the required amount of water and then adding the required amount of MAGNAVU<sup>®</sup>. Foaming is kept to a minimum by adding in this order. Both MAGNAVU<sup>®</sup> dip and spray cleaners were formulated for minimum foaming when agitated or sprayed. However, cleaning equipment may vary and foaming may occur. In case of excessive foaming, Magnaflux<sup>®</sup> anti-foam agent ZAF-2 may be added to the bath at 0.1 - 0.5% concentration.

Effectiveness of the cleaner bath should be maintained by monitoring concentration and the amount of soils present. When oils start to float on the surface, the bath is saturated and oils can be skimmed off to extend the life of the bath. The concentration of the tank can be maintained by using a hand-held refractometer. A TDS (Total Dissolved Solids) meter is recommended for concentrations less than 5%. Concentration charts are provided (see pages 3 and 4). It is recommended that the bath be changed every three weeks during normal use and the concentration monitored daily. Spray bath may have to be changed more frequently if recycled.

**PROCESS PARAMETERS**

<b>Dip Application</b>	
Concentration	5 - 20%
Time	15 Minutes
Mechanics	Ultrasonic or Agitated Immersion
Heat	Ambient - 160°F
Drying	Parts Should Be Dry Prior to NDT

**DIP APPLICATION**

<b>Soil</b>	<b>Concentration</b>	<b>Temp.</b>	<b>Time</b>
Shop Dust	5 - 10%	Ambient – 120°F	15 Minutes
Cutting Oils, Mineral Oil, Coolants	10 - 20%	120° - 160°F	15 Minutes
Lub.Greases, Carbon Deposits (soot)	10 - 20%	145° - 160°F	15 Minutes

**PACKAGING**

MAGNAVU® Dip – 5 Gal. Pail, 55 Gal. Drum.

**MAGNAVU® DIP APPLICATION  
CONCENTRATION CONTROL HAND-HELD REFRACTOMETER**

