

## DARACLEAN<sup>®</sup> 615 INHIBITOR

### GENERAL DESCRIPTION

DARACLEAN<sup>®</sup> 615 Inhibitor is a non-foaming additive that prevents rust and corrosion. It is hard water tolerant, free-rinsing, and will not leave any mineral films on part surfaces.

### COMPOSITION

DARACLEAN<sup>®</sup> 615 is formulated with a blend of inhibitors and emulsifiers. It is safe for use with most metals and is non-aggressive towards aluminum, brass, copper, and titanium alloys.

### LASTING PROTECTION

DARACLEAN<sup>®</sup> 615 is a blend of three different corrosion inhibitors plus a chelating agent for hard water conditioning. This provides excellent broad-spectrum corrosion resistance to critical part surfaces, without depositing any mineral scale or insoluble films. DARACLEAN<sup>®</sup> 615 forms a monomolecular layer over clean metal surfaces, providing a barrier between the metal and environmental oxidizers and humidity. This results in excellent protection against oxidation, corrosion, and rust for medium-term parts storage. The monomolecular film rinses away cleanly with solvent, coating prep, or aqueous cleaning.

### APPLICATION

DARACLEAN<sup>®</sup> 615 is designed to for use with immersion and spray rinses.

Cleaning Method	Concentration	Temperature	Typical Duration
Immersion	2 - 10%	80° - 180°F (27° - 82°C)	2 - 30 Minutes
Ultrasonic	2 - 10%	80° - 180°F (27° - 82°C)	2 - 30 Minutes
Spray	2 - 10% 2 - 5% Recommended	80° - 180°F (27° - 82°C)	0.25 - 3 Minutes

*Operating parameters should be optimized for each individual application.*

### SIMPLE TO USE

DARACLEAN<sup>®</sup> 615 is simple to use and easy to maintain. Typical dosage for rinse tanks is only 2% to 10%, keeping consumption at a minimum while still providing full protection. It is effective in immersion and spray applications, with very low foam levels and broad temperature stability. DARACLEAN<sup>®</sup> 615 should be stored in well-ventilated areas at temperatures between 40° and 100°F (4°– 38°C). Recommended shelf life is one year.

### PACKAGING

5 Gallon Pail (18.9 Liters) Part Number: 01-6120-40  
55 Gallon Drum (208 Liters) Part Number: 01-6120-45

## DARACLEAN® 615 INHIBITOR TYPICAL PROPERTIES

Appearance	Clear, Colorless to Pale Straw
Odor	Amine
Foam Level	Very Low
Cloud Point, 10% in DI Water	None to Boiling, > 212°F (> 100°C)
pH at 77°F (25°C)	Concentrate (10.0 - 10.5) 5% Solution (9.4 - 9.8)
Conductivity at 77°F (25°C)	14.8 mS
Refractive Index at 77°F (25°C)	11.5 °Brix
Specific Gravity	1.02
Density	8.5 lb./US gal.
Surface tension, 10% DI Water	56 dyne/cm
Vapor Pressure at 68°F (20°C)	18 mmHg
VOC (EPA Method 24)	Concentrate (41 g/L or 0.34 lb./US gal.) 10% Solution (41 g/L or 0.03 lb./US gal.)
Cast Iron Corrosion	Concentrate (2%/5% - Excellent) 10% Solution (10%/20% - Excellent)

## CONCENTRATION VERIFICATION

### HACH Alkalinity Titration Kit\*

Titrant	<b>0.5N Sulfuric Acid</b>
Indicator	<b>Bromcresol Green-Methyl Red</b>
Concentration %	<b>Titrant drops × 0.71</b>

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

**DARACLEAN<sup>®</sup> 615 CONCENTRATION TEST METHODS****TEST KIT TITRATION METHOD**

Sample Size	10 mL
Titration	0.5N Acid (HCl)
Indicator	Phenolphthalein
% DARACLEAN <sup>®</sup> 615 =	0.63 x Drops Titration

OR

New Kit

6 mL
0.50N Acid H <sub>2</sub> SO <sub>4</sub>
Bromocresol Green - Methyl Red
0.71 x Drops Titration

**CONDUCTIVITY METHOD**

% DARACLEAN <sup>®</sup> 615 =	Conductivity (μS) x 140
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