

## DARACLEAN<sup>®</sup> 283 AQUEOUS CLEANING SOLUTION

### GENERAL DESCRIPTION

Daraclean<sup>®</sup> 283 is a low-foaming, all-purpose alkaline cleaning solution that is an excellent cleaner for use on a broad spectrum of soils.

### COMPOSITION

Daraclean<sup>®</sup> 283 is formulated with a blend of surfactants, emulsifiers, and corrosion inhibitors. It is safe to use with most metals and is non-aggressive towards titanium alloys.

### SOIL REJECTING PROPERTIES

Daraclean<sup>®</sup> 283 possesses excellent soil-rejecting qualities. After soils are lifted from part surfaces they are suspended in the cleaner for a short time. Over time, solids will settle out, and oil and grease droplets will coalesce and float on the surface of the solution. Removal of soils can easily be accomplished using filters or skimmers as necessary. This action extends the useful life of Daraclean<sup>®</sup> 283 much further than emulsion-type cleaning solutions.

### APPLICATION METHOD

Daraclean<sup>®</sup> 283 is designed to be used with immersion, spray, and ultrasonic applications.

Cleaning Method	Concentration	Temperature	Typical Duration
Immersion	3 - 25%	80 - 180°F (27 - 82°C)	2 - 30 Minutes
Ultrasonic	3 - 25%	80 - 180°F (27 - 82°C)	2 - 30 Minutes
Spray	2 - 5% Recommended 1 - 12%	130 - 180°F (54 - 82°C)	0.25 - 3 Minutes
Steam	1 - 12 %	150 - 200°F (66 - 93°C)	1 - 5 Minutes

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

### SPECIFICATION COMPLIANCE

Daraclean<sup>®</sup> 283 has been tested and certified to meet and exceed Aerospace industry specifications for aqueous and alkaline cleaners. OEM Certifications include Boeing and Pratt & Whitney. Independent laboratory testing has confirmed that DARACLEAN 283 complies with AMS, 1551A, AMS 1526 (except dichromated magnesium, anodized aluminum, and zinc), ARP 1755, and ASTM F-483, F-484, F-485†, F-502, F-519, F-945, F-1110, and F-1111.

**PROPERTIES**

<b>pH Level</b>	13-14	Caustic	Higher pH cleaners are more aggressive and will clean tougher soils but high pH levels can also corrode or etch soft metal surfaces.
	11 - 13	High Alkaline	
	<b>9 - 11</b>	<b>High Alkaline</b>	
	7 - 9	Neutral	
<b>Foam Level</b>	High		High foam levels will penetrate cracks and holes better but foam cannot be tolerated in spray applications.
	Moderate		
	<b>Low</b>		
<b>Silicates</b>	<b>Yes</b>	No	Silicates prevent metal surface corrosion but can form mineral films at high temperatures.
<b>Phosphates</b>	Yes	<b>No</b>	Phosphates provide excellent cleaning action but are subject to environmental regulations.
<b>Hard Water tolerance</b>	<b>High</b>		Hard water can suppress cleaning actions. Some cleaners are formulated to counteract hard water effects.
	Moderate		
	Low		
<b>Aerospace Compliant</b>	<b>Yes</b>	No	See Specification Compliance.
<b>SCAQMD Certified</b>	Yes	<b>No</b>	VOC (10%) 0.0 g/L

**CONCENTRATION VERIFICATION**
**HACH Alkalinity Titration Kit\***

<b>Titrant</b>	0.5N Sulfuric Acid
<b>Indicator</b>	Bromcresol Green-Methyl Red
<b>Concentration %</b>	Titrant drops x 1.66

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

## APPLICATIONS

Excellent	••••	Aluminum	Anodized Aluminum	Brass & Bronze	Carbon Steel & Cast Iron	Copper	Magnesium	Nickel & Superalloys	Plating (Cd, Cr, Ir, Pt)	Stainless Steel	Titanium	Zinc
Good	•••											
Fair	••											
Poor	•											
Not Recommended												
Water-Soluble Oils	••		••••	••••	•••		••••	•••	••••	••••		
Machining Fluid	••		••••	••••	•••		••••	•••	••••	••••		
Synthetic Coolants	••		••••	••••	•••		••••	•••	••••	••••		
Medium Weight Oils	••		••••	••••	•••		••••	•••	••••	••••		
Lube Oils	••		••••	••••	•••		••••	•••	••••	••••		
Buffing Compounds	••		••••	••••	•••		••••	•••	••••	••••		
Motor Oils	••		••••	••••	•••		••••	•••	••••	••••		
Heavy Petroleum Oils	••		••••	••••	•••		••••	•••	••••	••••		
Carbonized Soils	•		•••	•••	••		•••	••	•••	•••		
Railroad & Axle Grease			•	•			•		•	•		
Glues												
Spray Adhesives												

## PACKAGING

5 Gallon Pail (18.9 Liters) Part Number: 01-6060-40

55 Gallon Drum (208 Liters) Part Number: 01-6060-45