

DARACLEAN[®] 232 AQUEOUS CLEANING SOLUTION

General Description:

DARACLEAN[®] 232 is a moderately-foaming, all-purpose alkaline cleaning solution that is excellent for use on a broad spectrum of soils.

Composition:

DARACLEAN[®] 232 is formulated with a blend of surfactants and corrosion inhibitors. It is safe to use with most metals and is non-aggressive towards aluminum, magnesium, and titanium alloys.

Soil Rejecting Properties:

DARACLEAN[®] 232 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[®] 232 much further than emulsion-type cleaning solutions.

Application Method:

DARACLEAN[®] 232 is designed to be used with immersion, ultrasonic, and light spray 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	1 - 12% 2 - 5 % Recommended	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[®] 232 has been tested and certified to meet and exceed most Aerospace industry specifications for aqueous and alkaline cleaners. OEM Certification to Pratt & Whitney requirements. Independent laboratory testing has confirmed that DARACLEAN[®] 232 complies with ARP 1755 and ASTM F-945.

Packaging:

55 Gallon Drum (208 Liters) Part Number: 01-6070-45

DARACLEAN® 232 Properties

pH Level	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	
	9 - 11	Alkaline	
	7 - 9	Neutral	
Foam Level	High		High foam levels will penetrate cracks and holes better but foam cannot be tolerated in spray applications.
	Moderate		
	Low		
Silicates	Yes	No	Silicates prevent corrosion of metal surfaces but can form mineral films at high temperatures.
Phosphates	Yes	No	Phosphates provide excellent cleaning action but are subject to environmental regulations.
Hard Water tolerance	High		Hard water can suppress cleaning actions. Some cleaners are formulated to counteract hard water effects.
	Moderate		
	Low		
Aerospace Compliant	Yes	No	See Specification Compliance.
SCAQMD Certified	Yes	No	VOC (10%) 2.4 g/L

 Correct Application

CONCENTRATION VERIFICATION HACH Alkalinity Titration Kit*

Titrant	0.5N Sulfuric Acid
Indicator	Bromcresol Green-Methyl Red
Concentration %	Titrant drops × 1.80

* Ordering info: **Alkalinity Test Kit, Model AL-TA**; Product # **2314500**; Mfr. **Hach Company**; Website www.hach.com

DARACLEAN® 232 Applications

Performance	Aluminum	Anodized Aluminum	Brass & Bronze	Carbon Steel & Cast Iron	Copper	Magnesium	Nickel & Superalloys	Plating (Cd, Cr, Ir, Pt)	Stainless Steel	Titanium	Zinc
Excellent										
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											



NFPA Rating (Concentrate)