

DARACLEAN[®] 212 AQUEOUS CLEANING SOLUTION

GENERAL DESCRIPTION

DARACLEAN[®] 212 is a foaming, all-purpose neutral cleaning solution that is excellent for use on a broad spectrum of soils.

COMPOSITION

DARACLEAN[®] 212 is formulated with a blend of surfactants, emulsifiers and corrosion inhibitors. It is safe to use with most metals and is non-aggressive towards aluminum and titanium alloys.

SOIL REJECTING PROPERTIES

DARACLEAN[®] 212 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[®] 212 much further than emulsion-type cleaning solutions.

APPLICATION METHOD

DARACLEAN[®] 212 is designed to be used with ultrasonic applications.

Cleaning Method	Concentration	Temperature	Typical Duration
Immersion	3 - 25% 8 - 12% Recommended	80 - 180°F (27 - 82°C)	2 - 30 Minutes
Ultrasonic	3 - 25%	80 - 180°F (27 - 82°C)	2 - 30 Minutes
Spray	Not Recommended	Not Recommended	Not Recommended
Steam	1 - 12 %	150 - 200°F (66 - 93°C)	1 - 5 Minutes

Operating parameters should be optimized for each individual application.

SPECIFICATION COMPLIANCE

DARACLEAN[®] 212 has been tested and certified to meet and exceed most Aerospace industry specifications for aqueous and alkaline cleaners. OEM Certifications include Boeing and Douglas. Independent laboratory testing has confirmed that DARACLEAN[®] 212 complies with AMS 1526(except dichromated magnesium), ARP 1755, and ASTM F-331, F-483, F-484, F-485, F-502, F-519, F-945, F-1110, and F-1111.

PACKAGING

5 Gallon Pail (18.9 Liters) Part Number: 01-6030-40
55 Gallon Drum (208 Liters) Part Number: 01-6030-45

DARACLEAN® 212 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%) 7.2 g/L

 Correct Application

CONCENTRATION VERIFICATION

HACH Alkalinity Titration Kit*

Titrant	0.5N Sulfuric Acid
Indicator	Bromcresol Green-Methyl Red
Concentration %	Titrant drops × 0.70

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

DARACLEAN® 212 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												



NFPA Rating (Concentrate)