

M-HP2



FEATURES

M-HP2 is a liquid degreasing agent specially formulated to clean parts made of aluminum alloy, titanium and special steels, in compliance with specific cleaning processes used in the aeronautics industry.

M- HP2's low-emulsion, mineral type formula minimizes COD and BOD and allows it to be used in oil-separation systems.

M- HP2 meets the standards of such leading aircraft manufacturers as Boeing, Pratt and Whitney, Douglas Aircraft and Rolls-Royce.



SPECIFICATIONS

Characteristics	Unit	Value	Method
Appearance	-	Light yellow	Visual
Density at 20°C	g/ml	1.10 ± 0.03	MO 0810
pH of pure product	-	11.8 ± 0.3	MO 0710
pH 1%	-	10.9	-

CHARACTERISTICS

Property	Unit	Value	Method
Surface tension at 1%	dynes / cm	29.4	-
Refractive index at 20°	-	1.39 ± 0.2	Laboratory
Solubility in water		total	Laboratory

PACKAGING TYPE

Available in 20 kg container and 210 kg drum.

STORAGE & VALIDITY

Store product in closed container
Storage life : 18 months

PROCESS PARAMETERS

M-HP2 is used at a concentration of 3 to 10% by volume. Although the ideal solution temperature is 60°C, product may be used above 70°C. Recommended for high-pressure spraying machines, above 100 bar.

HSE

M-HP2 contains no hazardous product, but must be handled with suitable safety glasses and gloves.

M-HP2 is over 90% biodegradable. Filter if necessary before disposal in sewer system in accordance with local regulations. Also consult product safety data sheet before using.

- Neutralization and titration information available upon request.

This data is based on information that the manufacturer believe to be reliable and offered in good faith. In no event will INVENTEC be responsible for special, incidental and consequential damages. The user is responsible to the Administrative Authorities (regulations for the protection of the Environment) for the conformity of his installation.

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ARMAKLEEN SPECIFICATION AND LIST OF TESTS CONFORMANCE CHART

Independent testing laboratories have determined the following conformances, except for FPI :

Specification	M-ARERO	M-AERO NS	M-HP	M-HP-2	M-GP	M-PW
ASTM F-519 Hydrogen Embrittlement	X	X	X	X	X	
ASTM F-483 Total Immersion Corrosion	X	X	X	X	X	
ASTM F-1111 Low-Embrittling cadmium plate corrosion	X	X	X		X	
ASTM F-485 Effect on unpainted metal surfaces	X	X	X		X	
ASTM F-1110 Sandwich Corrosion	X	X	X	X	X	
ASTM F-502 Effect on painted surfaces	X	X	X		X	
ASTM F-484 Stress crazing of type A and C acrylic	X	X	X		X	
ASTM F-484 Stress crazing of polycarbonate plastic		X				
ASTM F-483 Hot dip galvanizing corrosion		X				
ASTM D-2240 Effect on polysulfide sealants		X				
ASTM F-945 Stress corrosion-titanium alloys	X (AMS 4911 only)			X		X
ASTM E1417-95 standard practice for liquid penetrant examination				X		
ASTM G121 Practices for Prep. Of contaminated test coupons for the evaluation of cleaning agents for use in oxygen-enriched systems and components		X				
ASTM G122 standard test method to evaluate the effectiveness of cleaning Agents		X				
Rubber compatibility, on types AMS 3204, AMS 3209		X				
Wet adhesion tape test		X				
Effect on polyimide insulated wire		X				
SAE ARP 1755 effect of cleaning agents on aircraft engine materials-stock loss				X conform on all 32 substrates		X except on Mg AMS 4375
BSS 7219 Intergranular attack	X	X				
PWA 36604. Appendix A. hot Corrosion	X			X		X
PWA 36604. Appendix B. Compatibility w/PWA 407 Rubber				X		
PWA 36604. SEC 3.2.3.3 Determination of the effect of chemical cleaners on non-metallic materials				X		X
Rolls Royce CSS 253 test NO. 4 aqueous cleaners for use in automated ultrasonic aqueous cleaning systems	X	X				
Cleaner recyclability						X (96.5%)
MIL-PRF-87937C, Cleaning compound, aerospace equipment, type II and type IV		X				
MIL -C-29602, Cleaning compounds for parts washers and spray cabinets., type I				X		
Boeing BAC 5763, Emulsion cleaning and aqueous degreasing, type II. Class I and II, grade B	X					
Boeing BAC 5749, Alkaline cleaning	X					
Boeing D6-17487, Exterior and general cleaners and liquid waxes	X		X		X	
Boeing PS 12024 Cleaning, aqueous degreasing	X					
AMS 1526B, Cleaner for aircraft exterior surface water-miscible, pressure spraying type	X		X		X	
Douglas aircraft CSD #1, general purpose cleaner	X		X		X	
Allied signal EMS 53170 material requirements for aqueous and semi-aqueous degreasing				X		
Pratt and Whitney PMC 1440 Aqueous metal cleaner	X					
Rolls Royce CSS 200 control procedures for the purchase and supply of consumable materials used during manufacture	X	X				
Rolls Royce CSS 204 aqueous cleaners	X	X				

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