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Metal Compatibility of 2% ENZYME CLEANERS At Room Temperature

CONCLUSION: The results below show a worst case scenario by fully immersing the metal coupons in the enzyme cleaning solutions for two weeks. Actual cleaning protocols are designed to maximize detergency while incurring no damage to metal parts.

Customers are encouraged to conduct their own tests before using our enzyme cleaners.

METAL	PROPERTY	1 Day, %Δ			14 Days, %Δ		
		ZYMIT PRO®	ZYMIT® LOW-FOAM	Tap Water	ZYMIT PRO®	ZYMIT® LOW-FOAM	Tap Water
ALUMINUM 1100	%Δ Mass	-0.2	0.00	0.00	-0.05	+0.01	-0.05
	Δ Appearance	No change	No change	Several Pinpoints	Dull finish	No change	Pinpoints
BRASS ALLOY 260	%Δ Mass	-0.03	0.00	0.00	-0.10	-0.01	0.00
	Δ Appearance	Darker	Dark spots	Dark spots	Black	Dark spots	Dark spots
BRONZE ALLOY 220	%Δ Mass	-0.03	0.00	0.00	-0.07	-0.02	0.00
	Δ Appearance	No change	No change	Dark spots	Dull finish	Dark spots	Dark spots
1008 COLD ROLLED STEEL	%Δ Mass	-0.03	-0.02	-0.04	-0.36	-0.17	-0.47
	Δ Appearance	No change	Rust spots	No change	Rust spots	Rust/ Iridescent	Rust spots
COPPER ALLOY CA 110	%Δ Mass	-0.02	0.00	0.00	-0.08	-0.06	0.00
	Δ Appearance	No change	No change	Darker outlines	Dull finish	Darker outlines	Darker outlines
MONEL 400	%Δ Mass	-0.01	0.00	0.00	-0.01	0.00	0.00
	Δ Appearance	No change	No change	No change	No change	No change	No change
304 STAINLESS STEEL	%Δ Mass	0.00	0.00	0.00	0.00	0.00	0.00
	Δ Appearance	No change	No change	No change	No change	No change	No change
TITANIUM ALLOY, 8% Mn	%Δ Mass	0.00	-0.01	0.00	0.00	0.00	0.00
	Δ Appearance	No change	No change	No change	No change	No change	No change

Repeatability Precision

Instrument	Instrument Capability	Typical Average Measurements + Std. Dev	Coefficient of Variation
Analytical Balance	0.0001 g	16.9482 + 6.7E-5	4.0E-6%

Modified version of ASTM D471
Coupons were soaked at room temperature
for 14 days. Measurements were recorded at
the specified time periods.