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## Monode Electrolyte Chart

### Recommended Electrolytes for Marking Metals and Alloys

METALS and ALLOYS	ELECTROLYTE	POWER UNIT SETTING	TYPE of MARK	COMMENTS
Aluminum and Aluminum Alloys other than shown below	A-10 MSC#1 or C-10	D.C. D.C.	Black Clear	Allow few seconds for color to develop before cleaning. Used on bright finished surface
Aluminum Bronze, Aluminum Silicon Bronze, Phosphor Bronze	B-10	D.C. A.C.	Clear Black	80-90 Copper, Iron and Tin
Bronze and Brass	B-20 or B-10	D.C. A.C.	Clear Black	Electrolyte depends upon basic composition.
Carbides	MSC-4, MSC-3, C-10 or C-30	A.C.	Black	
Cobalt Alloys - Stellite	F-10 or F-30	D.C. A.C.	Clear Black	Sandblast surfaces should have light oil film before marking
Copper and Alloys	B-20 and B-10	D.C. A.C.	Clear Black	Black marks not always permanent
Discaloy	F-30	A.C.	Black	
Gold and Alloys	F-10 or C-10	D.C. A.C.	Clear Black	
Hastelloys*	F-20 or F-10	A.C.	Black	
Inconel*	MSC-4, F-10 or C-10	A.C.	Black	
Low Carbon and Mild Steel*	F-50, MSC#2, F-10 or F-20	A.C.	Black	
Vapor Blast or Sand Blast*	MSC#2, MSC#1, F-10 or F-50	A.C.	Black	Oil surface with light oil film before marking
High Alloy and Tool Steel*	MSC-4, MSC#1 or F-30	A.C.	Black	
Saw Steel*	MSC#2, F-10 or F-20	A.C.	Black	
Stainless 300 and 400*	MSC-4, MSC-7, MSC#1, MSC-14, MSC-120, F-50 or C-10	A.C. D.C.	Black Clear	
Monel Metals, Nickel and Alloys*	MSC-4, MSC#1 or C-10	D.C. A.C.	Clear Black	
Tin and Alloys	B-20 or F-20	A.C.	Black	
Titanium and Alloys	T-10	A.C.	(dark)	
Zinc and Alloys	F-20 or B-10	A.C.	Black	
<b>SUPPLEMENTAL COATING - ELECTROPLANE</b>				
Cadmium on Steel	F-10, F-20 or B-10	A.C.	Black	
Chrome - Hard	MSC#1, MSC-14, MSC-120	A.C. D.C.	Clear Clear	No composite coating/
Chrome - Decorative	MSC#1, MSC-14, MSC-120	D.C. A.C.	Clear Black	
Copper on Steel	B-10 or B-20	A.C.	Black	
Nickel (Electrolytic)	MSC#7, MSC#1 or C-10	D.C. A.C.	Clear Black	
Silver Plate	MSC#8 or B-10	D.C. A.C.	Clear Black	Black mark not always possible
Tin - Electroplate or hot dip	MSC#5, F-20 or B-10	A.C.	Black	
Zinc - Electroplate or hot dip	B-10 or F-20	A.C.	Black	
Chromated Cadmium and Zinc	B-5, B-10 or GR-11	D.C.	White	
Black Oxide on Steel	MSC#3, B-5 or GR-11	D.C.	White	
<b>NON-CHLORIDE ELECTROLYTES - The following electrolytes normally are furnished with just a trace of chlorides. Onspecial Orders they will prepared with Reagent Grade Chemicals and Distilled Water: B-10, T-10, MSC#3 and MSC#5.</b> *C50 has a PH of 7.2 tp 7.4 (non-corrosive)				

