

## CLASSIFICATIONS: AWS A5.14/ASME SFA 5.14 Class ERNiCu-7 UNS N04060

**DESCRIPTION:** Unibraze 60 is used for TIG, MIG and SAW welding of nickel copper alloys. It is also used for surfacing of steel. Unibraze 60 can be used for MIG overlay on steel after a first layer of Unibraze 61. Dissimilar applications include joining Monel alloys to Alloy 200 and copper-nickel alloys. It has good strength and resists corrosion in marine applications.

## **TYPICAL CHEMISTRY:**

Ni +Co	С	Mn	Fe	S	Si	Cu	Al	Ti	Р	Others
62.0 -	.15	4.0	2.5	.015	1.25	Bal.	1.25	1.5 –	.020	.50
69.0	max	max	max	max	max		max	3.0	max	max

## **TYPICAL MECHANICAL PROPERTIES:**

Tensile Strength	76,500 psi (530 MPa)			
Yield Strength	52,500 psi (360 MPa)			
Elongation	34%			

## **TYPICAL WELDING PARAMETERS:**

	Diameter	Voltage	Amperage	Shielding Gas	
MIG	.035" (.9mm)	26-29	150/190		
	.045" (1.14mm)	28-32	180/220	75% Ar/25% He	
	.062" (1.6mm)	29-33 200/250			
TIG	.035" (.9mm)	12-15	60-90		
	.045" (1.14mm)	13-16	80-110		
	1/16" (1.6mm)	14-18	90-130	100% Ar	
	3/32" (2.4mm)	15-20	120-175		
	1/8" (3.2mm)	15-20	150-220		
SAW	3/32" (2.4mm)	28-30	275-350		
	1/8" (3.2mm)	29-32	350-450	Suitable Flux	
	5/32" (4.0mm)	30-33	400-550		

Notice: The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.

Unibraze Corporation 1050 Penner Crest Houston, TX 77055