

PO BOX 816 - MARS, PA 16046

May 30, 2025

## CERTIFICATE OF ANALYSIS

THE FOLLOWING MATERIAL IS CERTIFIED TO:



GENERAL PRODUCT INFORMATION	CHEMICAL ANALYSIS		
	DEFINED BY SPECIFICATION		MEASURED IN LABORATORY
	Minimum	Maximum	
<b>Heat#: 2413112</b>	<b>Cu</b>	70.0000 - 99.9000	80.6950
<b>Manufacture Date:</b> 11/06/2024	<b>Sn</b>	0.0000 - 0.2000	0.0220
<b>Alloy:</b> C63000	<b>Zn</b>	0.0000 - 0.3000	0.2450
<b>Shape:</b> SOLID	<b>Fe</b>	2.0000 - 4.0000	3.2150
<b>Size#:</b> 0.0 X 0.638	<b>Ni</b>	4.0000 - 5.5000	4.8200
<b>Internal Standards:</b> MTL5-8020 REV. 2	<b>Al</b>	9.0000 - 11.0000	9.9800
<b>Customer PO#:</b>	<b>Mn</b>	0.0000 - 1.5000	1.0050
<b>Customer Job#:</b>	<b>Si</b>	0.0000 - 0.2500	0.0180
<b>Customer Part#:</b>			
<b>Control#:</b>			
<b>Date Shipped:</b>			
<b>Quantity Shipped:</b>			
<b>Weight Shipped:</b>			
<b>Packslip#:</b>			
<b>Invoice#:</b>			
<b>Country of Origin:</b>			

Physical Analysis *	Yield .5% UNDER LOAD		Tensile		Elongation in 4D or 2 in. min %	Brinell Hardness BRINELL 3000
	(PSI)	N/mm <sup>2</sup>	(PSI)	N/mm <sup>2</sup>		
<b>Defined By Specification</b>	<b>75000</b>	<b>517.1</b>	<b>118000</b>	<b>813.6</b>	<b>10</b>	<b>201 - 248</b>
2413112-1	92140	635.3	119350	822.9	11.07	238
2413112-2	92070	634.8	121700	839.1	11.6	240

This is to certify that all material listed is free from mercury contamination and no mercury bearing equipment was used in any of our manufacturing, fabricating, assembly or testing operations. No materials containing Class I or Class II ODC's; CFC's; Halons or HCFC's are used in our manufacturing process. None of the EPA's listed ODC's are used in our testing, assembly or fabricating procedures. Additionally we do not purchase, from our suppliers, any of the EPA's listed ODC's. \* Minimum tensile and yield strength shall be reduced 10% for cast bars having a thickness, diameter, cross section or wall of 4" or more. All Nickel measurements are inclusive of Cobalt concentrations.



CERTIFICATE NO.'S  
25513/A/0001/AN/En  
32119/A/0001/UK/En

CONCAST METAL PRODUCTS

Jared D. Goran  
Lab Manager