

## PREMABRAZE<sup>®</sup> 265

### ***NOMINAL COMPOSITION***

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Silver	65.0% ± 1.0%
Copper	20.0% ± 1.0%
Palladium	Remainder
Zinc	0.001% Max
Cadmium	0.001% Max
Lead	0.002% Max
Phosphorus	0.002% Max
Carbon	0.005% Max
Other high vapor pressure elements each <sup>(1)</sup>	0.001% Max
Total all high vapor pressure elements (Including zinc, cadmium, and lead)	0.010% Max
Total all other impurity elements	0.01% Max

<sup>(1)</sup> Elements with a vapor pressure higher than 10<sup>-7</sup> Torr (1.3 x 10<sup>-5</sup> Pa) at 932°F (500°C)

### ***PHYSICAL PROPERTIES***

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Color	Silver White
Melting Point (Solidus)	1562°F (850°C)
Flow Point (Liquidus)	1652°F (900°C)
Brazing Temperature Range	1652°F - 1752°F (900°C - 956°C)
Specific Gravity	10.33
Density (Troy oz/in <sup>3</sup> )	5.44
Electrical Conductivity (%IACS) <sup>(2)</sup>	22.0
Electrical Resistivity (Microhm-cm)	7.80

<sup>(2)</sup> IACS = International Annealed Copper Standard

### ***PRODUCT USES***

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Premabraz 265 can be used on any of the common ferrous and non-ferrous alloys. Due to its low vapor pressure compared to standard silver base filler metals, Premabraz 265 is suitable for use in all vacuum applications such as electronic valve construction, and vacuum tube construction in electronic industry. Premabraz 265 offers low penetration of the substrates; therefore it is often recommended in brazing of thin wall assemblies i.e. honeycomb structures and heat exchangers. Often this alloy is used in brazing of metallized ceramics to nickel-cobalt-iron assemblies.

### ***BRAZING CHARACTERISTICS***

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The palladium content in Premabraz 265 inhibits the potential of stress corrosion cracking in iron-nickel base metals in comparison to standard silver-copper alloys. Premabraz 265 exhibits high corrosion and oxidation resistance.

### ***PROPERTIES OF BRAZED JOINTS***

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The properties of a brazed joint are dependent upon the base metal, joint design and brazing technique. For controlled atmosphere brazing or vacuum brazing the recommended radial joint clearance for silver base alloys fall within 0.000 in. - 0.002 in. (0.00 mm - 0.05 mm.) range.

## ***AVAILABLE FORMS***

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Wire, strip, engineered preforms, specialty preforms per customer specification.

## ***SPECIFICATIONS***

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Premabraz 265 alloy conforms to the following specifications:

- International Organization for Standardization (ISO) 17672 Pd 481a

## ***APPLICABLE PRODUCT CODE(S)***

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The applicable Lucas-Milhaupt product code(s) for Premabraz 265: A00000452, Legacy Code: 69-265.

## ***SAFETY INFORMATION***

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The operation and maintenance of brazing equipment or facility should conform to the provisions of American National Standard (ANSI) Z49.1, "Safety in Welding and Cutting". For more complete information refer to the Safety Data Sheet for Premabraz 265.

## ***WARRANTY CLAUSE***

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