

## LM 69-207

### ***NOMINAL COMPOSITION***

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Silver	2.0% ± 0.5%
Copper	53.0% ± 1.0%
Zinc	42.0% ± 2.0%
Nickel	3.0% ± 0.5%
Other Elements (Total)	0.15% Max

### ***PHYSICAL PROPERTIES***

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Color	Brass Yellow
Melting Point (Solidus) <sup>(1)</sup>	1600°F (871°C)
Flow Point (Liquidus) <sup>(1)</sup>	1700°F (927°C)
Brazing Temperature Range	1700°F - 1800°F (927°C - 982°C)
Specific Gravity	8.10
Density (Troy oz/in <sup>3</sup> )	4.27
Electrical Conductivity (% IACS) <sup>(2)</sup>	N/A
Electrical Resistivity (Microhm-cm)	N/A

<sup>(1)</sup> Solidus and Liquidus values were approximated using Differential Thermal Analysis (DTA)

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

### ***PRODUCT USES***

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The high flow point and narrow melting range of LM 69-207 are useful for applications where the brazing and heat treating of ferrous alloys are combined in one operation.

### ***BRAZING CHARACTERISTICS***

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LM 69-207 is a low cost, intermediate temperature silver brazing filler metal suitable for joining various ferrous and non-ferrous alloys that can be heated to 1700°F (927°C) without damage. The relatively high flow point of this filler metal, combined with its high zinc content, tends to cause a rapid alloying of LM 69-207 with non-ferrous alloys. For this reason, the time the brazing alloy is kept molten, in contact with the base metal, should be kept to a minimum. In furnace brazing, the heating cycle should be kept short to avoid excessive volatilization of the zinc with resultant formation of pinholes in the brazing alloy layer.

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

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The properties of a brazed joint are dependent upon numerous factors including base metal properties, joint design, metallurgical interaction between the base metal and the filler metal.

### ***AVAILABLE FORMS***

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Powder and paste.

### ***SPECIFICATIONS***

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LM 69-207 alloy conforms to the following specifications: N/A

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

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The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 69-207.

## ***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 Material Safety Data Sheet for LM 69-207.

## ***WARRANTY CLAUSE***

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