## Lucas-Milhaupt BRAZE 630 Silver Based Cadmium Free Filler Metal

Category : Metal , Nonferrous Metal , Precious Metal , Silver Alloy , Solder/Braze Alloy

## Material Notes:

Characteristics: Braze 630 is very sluggish because of its wide melting range, and will bridge wide or irregular joint clearances. To avoid liquation (separation and flow of the low-melting components) the joint and alloy preplacement should be designed for a minimum distance of flow (i.e., preplaced sheet-preforms), particularly when slow heating will occur through the melting range. Fast-heating or application of the alloy after the joint is at temperature will minimize liquation. Heating the assemblies above 1700°F (925°C), as in brazing/heat-treatment, will improve the fluidity of the brazing alloy and accelerate the heating rate in the alloy melting range. Handy Flux is usually recommended for use with Braze 630 when brazing the 400 series stainless steels with torch, air-gas burner, or RF induction coil. Joint clearances of 0.002" - 0.010" (5-25 mm) are recommended. Better flow could be obtained with Handy Flux Type B-1, but this improvement would reduce corrosion resistance of the joint at fillet edges. Braze 630 can be used in protective atmosphere (including vacuum) furnace brazing without flux. Excellent joints with good smooth fillets can be obtained on stainless steels at furnace temperatures of 1700 - 1850ŰF with a H2N2 atmosphere having a dew point of -50ŰF or lower and joint clearances of 0.002" - 0.007" (.05-.18mm). Applications: Braze 630 is a low temperature brazing filler metal developed for use on 400 series stainless steels for maximum resistance to interface corrosion. It can be used on 200, 300, and 400 series stainless steels and other alloys for combined brazing/heat treatment with flux, or in protective atmosphere (including vacuum) furnaces. It is used in vacuum applications, and in joints where greater oxidation resistance than the other silver brazing alloys is required. It is also used in surgical and food-handling equipment requiring cadmium-free alloys. Braze 630 can be used on joints exposed to conditions favoring dezincification of zinc-coating alloys such as salt-water at elevated temperatures. Specifications: This alloy conforms to the following specifications- AWS A5.8 BAg-21, SAE AMS 4774, ASME Boiler and Pressure Vessel Code Section II-C SFA 5.8 BAg-21 Information provided by Lucas-Milhaupt, Inc.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_Lucas-Milhaupt-BRAZE-630-Silver-Based-Cadmium-Free-Filler-Metal.php

Physical Properties	Metric	English	Comments
Density	9.85 g/cc	0.356 lb/in³	
Thermal Properties	Metric	English	Comments
Melting Point	690.6 - 801.7 °C	1275 - 1475 °F	
Solidus	690.6 °C	1275 °F	Melting Point
Liquidus	801.7 °C	1475 °F	Flow Point

Component Elements Properties	Metric	English	Comments
Copper, Cu	27.5 - 29.5 %	27.5 - 29.5 %	
Nickel, Ni	2.0 - 3.0 %	2.0 - 3.0 %	
Other, total	<= 0.15 %	<= 0.15 %	
Silver, Ag	62 - 64 %	62 - 64 %	



Component Elements Properties	Metric.5 %	English %	Comments
Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.0000134 ohm-cm	0.0000134 ohm-cm	
Processing Properties	Metric	English	Comments
Processing Temperature	857.2 - 1010 °C	1575 - 1850 °F	Brazing Range
Descriptive Properties		Value	Comments
Color		White	

## Contact Songhan Plastic Technology Co.,Ltd.

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