

# Material Product Data Sheet Silver Alloy Wire for Brazing

# Wire Products: Metco 8526

# 1 Introduction

Metco<sup>™</sup> 8526 is a silver-based alloy recommended for applications where cadmium-bearing alloys cannot be used. This alloy has a higher melting temperature with higher mechanical strength at higher temperatures than pure silver.

As a braze filler metal, Metco 8526 is a general purpose, intermediate temperature braze alloy for use on copper, brass, nickel-silver, bronze, steel and other non-ferrous alloys with a melting point above 765 °C (1450 °F). can be used to join dissimilar metals like ferrous to non-ferrous substrates with close joint clearances. In particular, it is extensively used to join copper, brass, nickel and silver to ferrous alloys. It has a wide melting range of 90 °C (160 °F) and can be useful in wide-gap applications.

#### **1.1 Typical Uses and Applications**

- Food and dairy containers, vessels and manufacturing equipment
- Refrigeration equipment
- Aircraft engine seals

Quick Facts	
Classification	Wire, Ag-based
Chemical formula	Ag 99.99+ or Ag 38Cu 32Zn
Manufacture	Drawn wire
Specific Gravity	8.84
Melting Point	solidus: 677 °C (1250 °F) liquidus: 766 °C (1410 °F)
Purpose	Joining
Joint strength	Excellent
Process	Brazing



# 2 Material Information

# 2.1 Chemical Composition

Product	Chemical Composition (nominal wt. %)				
	Ag	Cu	Zn	Others	
Metco 8526	Balance	38	32		

#### 2.2 Morphology and Available Wire Sizes

Product	Morphology	Available Wire Sizes	
Metco 8526	Solid wire	2.3 mm (11 ga)	
		3.2 mm (1/8 in)	

# 2.3 Key Selection Criteria

- Metco 8526
  - Good mechanical strength at higher temperatures
  - Cadmium-free alloy
  - Can be used to join dissimilar metals

#### 2.4 Related Products

Metco Joining & Cladding has an extensive line of high temperature nickel-based and cobalt-based braze alloys, of which many are approved for use in aircraft turbine engines and power generation turbines. Please ask your Metco Joining & Cladding Sales Representative for information on brazing alloys to meet your joining requirements.

#### 2.5 Customer Specifications

Product	Customer Specification	For Product Sourced From:
Metco 8526	Roll-Royce plc MSRR 9507/113	U.S.A. or Europe
	American Welding Society AWS A8.5/A5.8M BAg-20	U.S.A. or Europe

# **3** Processing Information

#### 3.1 Brazing Parameters for Metco 8526

Melting Range	solidus liquidus	677 °C 766 °C	1250 °F 1410 °F
Recommended Brazing Range		766 to 857 °C	1410 to 1575 °F
Joint Strength		Excellent	
Electrical Resistance		6.85 μΩ∙cm	

# 4 Commercial Information

# 4.1 Ordering Information and Availability

Product	Order No.	Wire Diameter	Package Type	Sales Units	Availability	Distribution	Origin
Metco 8526	1042931	2.3 mm (11 ga)	10 kg Coil	kg	Special Order	Europe	Germany
Metco 8526	1004605	3.2 mm (1/8 in)	10 kg Coil	kg	Special Order	Europe	Germany

Note: minimum order quantities may apply.

# 4.2 Handling Recommendations

Store in the original container in a dry location.

## 4.3 Safety Recommendations

See the SDS (Safety Data Sheet) 50-862 localized for the country where the material will be used. SDS are available from the Metco Joining & Cladding web site at www.Metco-joiningcladding.com/metco (Resources – Safety Data Sheets).



Information is subject to change without prior notice.

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