

SilverAlloy A-40Ni2

◆ INTRODUCTION

SilverAlloy A-40Ni2 is a cadmium-free silver brazing alloy. Addition of nickel to the silver-copper-zinc alloy imparts corrosion properties which retard joint or interface corrosion of the brazed assembly. SilverAlloy A-40Ni2 is a suitable replacement to cadmium-containing alloys.

◆ APPLICATIONS

Typical applications are the joining of 300-series stainless steels in the food, medical, and dental fields. The nickel element in SilverAlloy A-40Ni2 also improves the bond strength when joining tungsten carbide cutting tips.

◆ CHEMICAL COMPOSITION

Silver	Copper	Zinc	Nickel	Total other
40.0%	30.0%	28.0%	2.0%	0.15% max

◆ PHYSICAL and MECHANICAL PROPERTIES

Solidus	1240 °F (671 °C)
Liquidus	1435 °F (780 °C)
Brazing Range	1435-1650 °F (780-900 °C)
Specific Gravity	8.968
Density	4.658 TO/Cu.In.
Color	Light Yellow



◆ SPECIFICATIONS MEET or EXCEED

- AWS A5.8 BAg-4
- ASME BAg-4
- UNS P07440
- EN 17672 Ag 440

◆ AVAILABLE FORMS

- Powder/Paste
- Wire, Rods, Foil
- Specialty preforms per customer specifications

◆ STANDARD ROD SIZES AND DIAMETERS

- Diameters: 1/32", 3/64", 1/16", 3/32", 1/8"
- Sizes: 1, 3, 5, or 50 troy ounces
- Lengths: 18, 20, or 36 inches

◆ PROPERTIES OF BRAZED JOINTS

Generally, the joint strength using SilverAlloy A-40Ni2 will usually surpass the strengths of the base metals. Strength is a function of the base metals being joined, type of joint, design of joint, joint clearances and brazing procedures.