



## UNITED ALLOY # SILVADIUM™

Be insured in quality, Be insured in service, Be insured in “United Alloys.

UNITED ALLOY is uniquely different from other available alloys. Combining the highest purity metals available, stringent quality control, special de-oxidizers and grain refiners, produce trouble-free, superior quality castings and fabrication or rolling (hand-made).

UNITED ALLOY # SILVADIUM™ is designed for Superior Sterling Silver is a proprietary Palladium based de-oxidized sterling silver designed to have excellent tarnish resistance and offers a unique metallic silver color and eliminate fire scale and reduce porosity while still retaining the advantageous characteristics of our other sterling silver grains. This sterling silver grain can be used for regular casting, stone set in place casting and fabrication or rolling (hand-made), if desire.

This Sterling Silver grain is already mixed can be used without adding any metal.

- 1.) Melt Temperature for Casting : 1,000 - 1050 °C
- 2.) Flask Temperature :

WEIGHT	CENTRIFUGAL CAST	VACUUM CAST
Light	530 - 550 °C	620 - 680 °C
Medium	490 - 520 °C	550 - 590 °C
Heavy	450 - 480 °C	480 - 540 °C

- 3.) Quench Time : After casting, wait 20 - 25 minutes before quenching flask.
- 4.) Pickling : United’s Brite-Cast™ (Ammonium Bi-fluoride), Sparex # 2 (sodium bisulfate), 10% - 20% Sulfuric Acid.  
 Rubber gloves and safety glasses are recommended when using acid pickle.
- 5.) Re-using : We recommend a 50% fresh / 50% Scrap mix, Cleans scrap well before re-melting.
- 6.) Specific Gravity : 10.53
- 7.) Hardening : Place in a pre-heated oven set at 300 °C for 2 hour and air cool.
- 8.) Soldering : United Silver Solder Alloy # SSA or already mixed silver solder sheet.  
 Laser welding is recommendation for matching metallic white color.
- 9.) Notes : Melt temperature may vary with type of unit.