



UNITED ALLOY # 013NA

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 # 013NA Based on our proprietary sterling silver Alloy is designed for Superior Sterling Silver. This master silver alloy contains Germanium for very excellent tarnish resistance, an unique metallic silver color with very high luster in finished product and De-Oxidizers to resist oxygen absorption to reduce gas porosity, better solidification characteristics to reduce shrinkage porosity, and eliminate fire scale to make less finishing rejects. This master silver alloy can be used for regular casting and also stone set in place casting and rolling (hand-made).

We do recommend pre-graining all alloy and fine silver before casting to assure a uniform mixture.

- 1.) Melt Temperature for Alloying : 1,000 - 1,040 °C
- 2.) Melt Temperature for Casting : 990 - 1,020 °C
- 3.) 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 |

- 4.) Quench Time : Wait 15 - 20 minutes before quenching flask.

- 5.) Pickling : United's Brite-CastTM (Ammonium Bi-fluoride), Sparex # 2 (sodium bisulfate), 10% - 20% Sulfuric Acid.

Rubber gloves and safety glasses are recommended when using acid pickle.

- 6.) Re-using : We recommend a 50% fresh / 50% Scrap mix, Cleans scrap well before re-melting.

- 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.

- 9.) Note : Melt temperature may vary with type of unit.

Representative Office : UNITED PM (THAILAND) CO., LTD.

467/7 2nd Floor, Mahatun Rama 3 Center, Rama 3 Road, Bang Khlo, Bang Kho Leam, Bangkok. 10120, Thailand.

Tel : (662) 292 1992, 292 1993 Fax : (662) 292 1994 Mobile 081-694 8866, 081-751 7384 E-mail : sales@unitedpmthailand.com