

# Sterilite™ Sterling Products

## Performance Characteristics Data

<u>Alloy</u>	<u>Tarnish Resistance</u>	<u>Hardness as Cast</u>	<u>Hardness Heat Treated</u>	<u>Comment</u>
Regular Sterling	X	62 R/ 72 V	73 R/ 90 V	Casting Fire Scale
Sterilite 127	3X	70 R/ 84 V	88 R/130 V	Spring alloy/Good casting + Rolling
Sterilite 255	7X	69 R/ 83 V	78 R/ 102 V	High Tarnish Resistance ,Bright color Excellent flow properties, Casting/Rolling Alloy
Sterilite 250B/250M	6X	65 R/ 76 V	76 R/ 97 V	High Tarnish Resistance Excellent Flow Properties, Casting/Rolling Alloy
Sterilite 256	4X	67 R/ 79 V	75 R/ 95 V	Medium high Tarnish Resistance Good Flow Properties/More Forgiving
Sterilite 407	3X	63 R/ 74 V	74 R/ 92 V	Medium low De-Ox, Good flow Cast/Rolling Alloy

**Tarnish Resistant Test-** Sulfur fume test with 10% liver of sulfur in distilled water at 120F. This test simulates real life tarnishing conditions and is widely accepted by the industry. Regular sterling was used as the control sample with a tarnish resistance of X (4 months). The 250 alloy at 6X would translate into approximately 24 months of tarnish resistance.

**Hardness Test-** All alloys were cast with a controlled size flask and hardness disks located in the same location of each tree. The flask was quenched in 20 minutes on all pieces to ensure consistency. Hardness tests were evaluated using Rockwell ® T-15 scale and Vickers (V) scale. The disks were tested by diamond probe in several locations with the final result being the average of all tests. Heat treating was at 750°F for 2.5hrs with samples solution annealed first.