

Sterilite Sterling Replenisher

Blending Guidelines

The Sterilite Replenisher is designed to replace the zinc and silicon that is burned off during the casting process.

Replenish Ratio: Our recommended replenishing ratio is 1 part replenisher to 80 parts recycled casting trees and buttons. (1.25% replenisher to 98.75% recycled sterling). The amount of replenisher used will vary depending on the amount of zinc and silicon burned off during your casting process. The higher the casting temperatures the greater the burn off. We recommend you experiment with replenishment ratios from 1 to 40 (2.5%) up to the 1 to 100 (1.0%) to determine the best ratio for your product.

Blending Process: The best results will be achieved if you pre-grain your tress and buttons with the replenisher prior to casting which will ensure that you get a complete homogeneous blend. If you are blending and casting in one operation, we recommend that you layer the replenisher in the middle of the crucible with buttons on the bottom and casting tree pieces on top. Blend at your standard temperatures and stir metal, if possible. Also recycled sterling must be cleaned properly of investment and pickled to reduce contamination.

Recycle Duration: We recommend that the replenisher be used up to 6 times on 100% recycled clean sterling, due to the buildup of silacides and oxides that can cause hard spots and micro porosity. You can recycle longer if you are blending new Sterilite sterling grain in with the old casting trees (blending 50% clean scrap and 50% new grain). This will improve your casting quality and will require ½ of the replenisher.

Cracking: One possible problem is cracking if too much replenisher is used. Reduce the amount of replenisher used to solve this problem.

Tarnish Resistance: The replenisher can also be used too boost the tarnish resistance on recycled or new sterling. Increased zinc and silicon help form a protective layer to inhibit oxidation

Silver Assay Control: Since the replenisher is approx 70% silver, care must be taken to monitor the fine silver content of you product. At a 1/80 blending ratio the silver content will drop approx .003 which is fine for most manufacturers since the silver assay increases when you burn off zinc during the casting of virgin metal.