

STRONGHOLD 7130, 7136, 7158 MOUNTING ADHESIVES

Technical Bulletin

Aremco's Stronghold waxes are primarily used for the temporary mounting of flat optical pieces for polishing and grinding, and for mounting ceramics, ferrites and gemstones for grinding and other machining operations.

Stronghold 7130, 7136, and 7158 waxes are resistant to many common solvents including water, but soluble in **chlorinated hydrocarbons**, and **citrus solvents** that are relatively effective. Boiling hot water will remove the bulk of the waxes, and further cleaning with solvent may be necessary. Ultrasonics and heat will help to remove these waxes as well.

These products are not recommended for vacuum applications.

PRODUCT HIGHLIGHTS

Stronghold 7130

Softening Point 140–150 °F (60–66 °C) Flow Point 170–180 °F (76–82 °C)

Lap-Shear Strength 125–150 psi

Stronghold 7136

Softening Point 165–170 °F (74–76 °C) Flow Point 175–180 °F (80–82 °C)

Strength 50-100 psi

Stronghold 7158

Softening Point 140–150 °F (60–66 °C) Flow Point 155–160 °F (68–71 °C)

Strength 150–250 psi

Note: Softening and flow points are determined by ASTM D36 Ring & Ball Test.

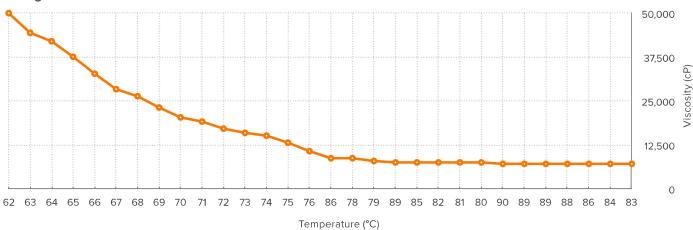
AVAILABILITY

All waxes are available in the following forms:

Shape	Size	Min Order Qty	Part No.
Rectangular Bar	$\frac{3}{8}'' \times \frac{3}{8}'' \times \frac{33}{8}''$	20 Bars (1 Tray)	7xxx.10
Rectangular Bar	5/8" × 1" × 7"	10 Bars (1 Tray)	7xxx.60
Round Stick	%" Dia × 7"	5 Sticks	7xxx.20
Round Stick	3" Dia × 6"	5 Sticks	7xxx.40
Aluminum Pan	1" × 6" × 8"	5 Pans	7xxx.50

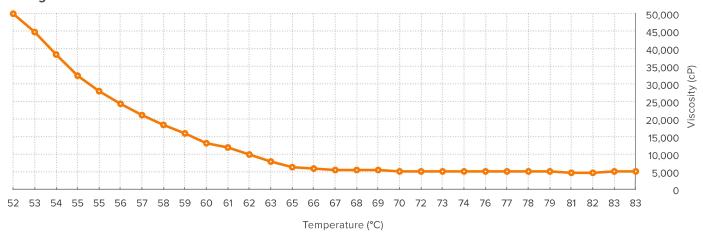
VISCOSITY VS. TEMPERATURE CURVES

Stronghold 7130



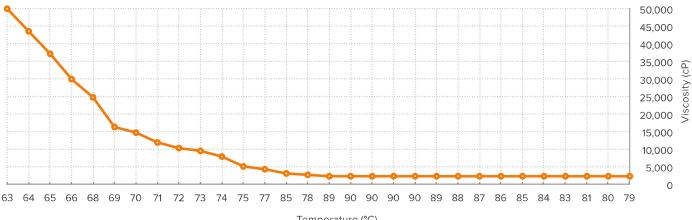
LV5 Spindle @3 RPM

Stronghold 7136



LV5 Spindle @3 RPM

Stronghold 7158



Temperature (°C)

APPLICATION PROCEDURES

- Using a hot plate or oven, heat a ceramic or glass mounting block to the flow temperature of the selected adhesive. Make sure to work in a well-ventilated area, and do not overshoot the flow temperature, otherwise, the adhesive will begin to decompose and polymerize, causing a reduction in strength.
- 2. Apply a uniform layer of adhesive to the heated mounting plate and place the substrate over the adhesive. Using a weight, apply even pressure to the substrate to remove air bubbles and to ensure that the substrate is parallel to the plate. Apply a fillet of the adhesive around the perimeter of the substrate to increase the holding strength.
- 3. Remove the mounting plate from the heat source and allow it to cool slowly to room temperature until the adhesive is hardened. Cool for 20–30 minutes before processing.
- 4. Process the substrate as required, then remove the parts by re-heating the mounting block to the flow temperature. Use a tool to remove the substrate from the mounting plate and follow clean part using a suitable solvent. Note that these waxes are resistant to many common solvents including water, but are soluble in chlorinated hydrocarbons, and citrus solvents that are relatively effective. Boiling hot water will remove the bulk of the waxes, and further cleaning with solvent may be necessary. Ultrasonics and heat will help to remove these waxes as well.

Suggested Process Diagram For Cleaning

