AREMCO

STRONGHOLD 7036 BLANCHARD MOUNTING ADHESIVE

Technical Bulletin A9-S2

Aremco's Stronghold 7036 Blanchard Adhesive is primarily used for the temporary mounting of semiconductor wafers for dicing or grinding, and for mounting ceramics, ferrites, optical lenses, and gemstones for grinding, polishing, and other machining operations.

Stronghold 7036 is resistant to most common solvents including water. It is solid at room temperature and starts to soften at 160–170 °F (71–76 °C), with a viscosity of 6,000 cP at 250 °F (120 °C). Above 60 °C, work pieces may be moved and repositioned. After a few minutes at room temperature, the adhesive will set and machining can begin.

Stronghold 7036 may be heated to 400 °F (200 °C) for a few hours if necessary. It may be kept in a heated vessel up to 120 °C, for 1–2 days before deteriorating, at which point the viscosity and flow point will gradually increase and solubility will decrease.

Acetone is the most effective solvent for Stronghold 7036, but alternatives including Aremco's 7036-S Stripper (Dibasic Ester), Methyl Pyrrolidinone, and Propylene Carbonate will work, but more slowly. The use of a heated ultrasonic cleaner will also speed and improve removal.

PRODUCT HIGHLIGHTS

Stronghold 7036

Softening Point	160–170 °F (71–77 °C)
Flow Point	185–194 °F (85–90 °C)
Lap-Shear Strength	1,100–1,200 psi

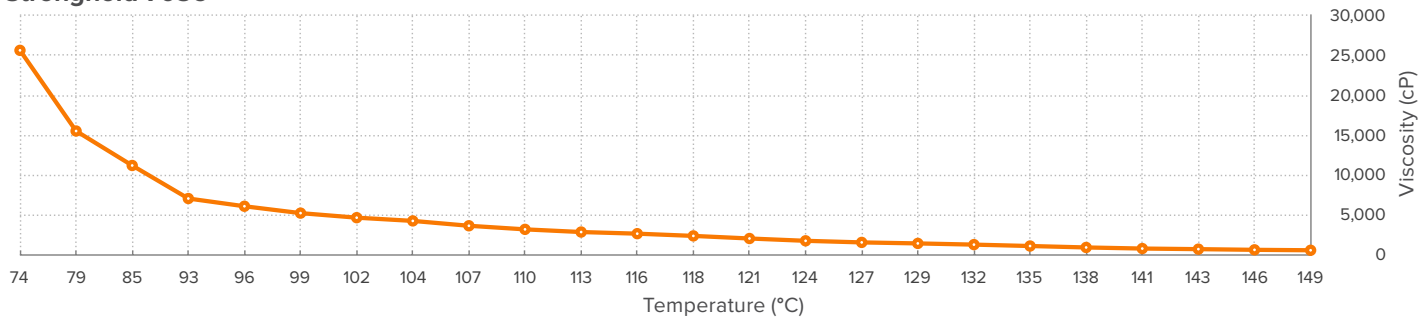
Note: Softening and flow points are determined by ASTM D36 Ring & Ball Test.

AVAILABILITY

Shape	Size	Min Order Qty	Part No.	Weight
Rectangular Bar	⅝″ × 1″ × 7″	10 Bars (1 Tray)	7036.60	0.20 Lbs/Stick
Aluminum Pan	1″ × 6″ × 8″	5 Pans	7036.45	0.50 kg/Pan
Aluminum Pan	1″ × 6″ × 8″	5 Pans	7036.50	1.0 kg/Pan

VISCOSITY VS. TEMPERATURE CURVES

Stronghold 7036



#2 Spindle @12 RPM used for viscosity < 2,500 cP, @6 RPM for viscosity 2,500–5,000 cP, @3 RPM for viscosity 5,000–7,500 cP, @1.5 RPM for viscosity 7,500–15,500 cP, @1 RPM for viscosity 15,500–26,000 cP.

APPLICATION PROCEDURES

Stronghold 7036 | Solid form

1. Using a hot plate or oven, heat a ceramic or glass mounting block to the flow temperature of the 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 “Cleaning Procedures” section.be necessary. Ultrasonics and heat will help to remove these waxes as well.

Stronghold 7036 | Liquid Form

1. This adhesive can be applied in a thin, uniform film by dissolving and spin-coating, spraying or brushing onto the substrate. Simply crush the adhesive stick into a powder and mix with acetone in a ratio of 80 parts acetone to 20 parts 7036 by weight.

2. Apply the solution onto the parts and allow solvent to evaporate for a minimum of 5 minutes. A heat gun can be used to accelerate the evaporation rate.

3. Press parts together and heat to ~165 °F for 10–15 minutes, then cool to room temperature before processing.

OPTIONAL CLEANING AGENT

Stronghold 7036-S Stripper

This is an alternative to acetone that is an environmentally safe, non-ionic cleaning agent for removing Stronghold 7036.

Features

- Low Evaporation Rate
- Rinses with Water
- Non-Flammable
- Non-Reactive with Metals
- Biodegradable

Usage

7036-S works best with an ultrasonic system at 120–140 °F (50–60 °C). The evaporation rate is much slower than acetone so a good lifecycle will be achieved in comparison. Replace 20% of the stripper with new material as adhesive residue begins to concentrate. Refer to process diagram for a suggested cleaning procedure.

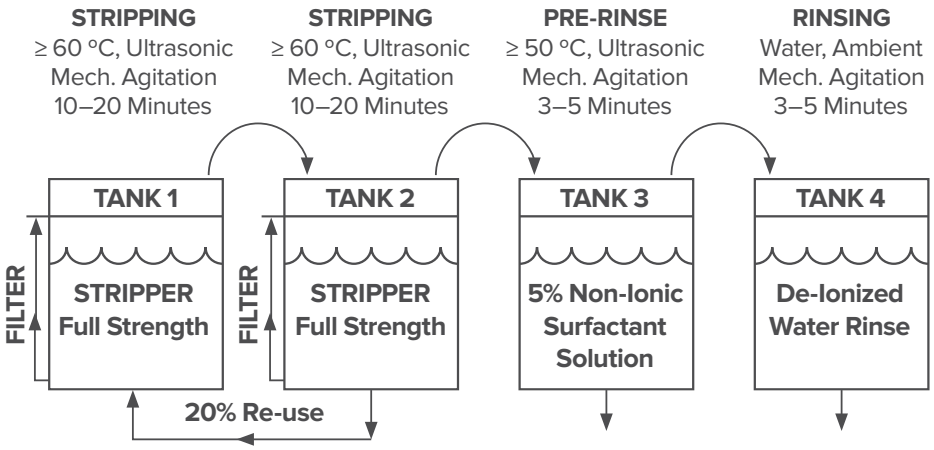
Rinsing

A stepwise, warm rinsing process is recommended after removing the adhesive. Rinse in a dilute, non-ionic surfactant or liquid detergent system, followed by a final rinse in deionized water to eliminate water spots due to hard salts and contaminant re-deposition.

Handling and Storage

This cleaner is readily biodegradable and non-toxic to marine life. The use of gloves and goggles is recommended. Respiratory protection or ventilation is recommended under normal handling. When heated, vapors should be ventilated from the work space. Keep container tightly closed and store in a cool, dry, well-ventilated area or cabinet.

Suggested Process Diagram For Cleaning



Refer to Price List for complete order information.

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The user assumes all risk of use or handling whether or not in accordance with directions or suggestions, or used singly or in combination with other products.