I. **SCOPE.** The purpose of this method is to determine the percent non-volatile content of rapid cure, self-leveling silicone joint sealants by measurement of change in weight of material.

II. **APPARATUS.**
   A. **Timer**, readable in one hour increments.
   B. **Analytical Balance**, readable to 0.0001 g.
   C. **Desiccator**, containing Drierite.
   D. **Aluminum Weight Dish**, 5/8 x 2.5 inch (1.5 x 60 mm)
   E. **Forced Draft Oven**, capable of maintaining a temperature of 482° F ± 9° F (250° ± 5° C.)

III. **REAGENTS.**
   A. Reagent grade acetone.
   B. Reagent grade toluene.

IV. **PROCEDURES.**
   A. Preheat 2 weighing dishes per sealant at 482° F ± 9° F (250° ± 5° C.) for 10 minutes. Cool dishes to room temperature in desiccator and then weigh to the nearest 0.001 g (W₂).
   B. Weigh duplicate samples of approximately 3 g of each sealant into pre-weighed dishes. Then weigh sample plus dish to the nearest 0.001 g (W₂).
   C. Add approximately 3 ml of acetone or toluene, depending on chemical makeup of sealant, and mix thoroughly.
   D. Place dish plus sample immediately into 482° F ± 9° F (250° ± 5° C.) forced draft oven and set timer for 2 hours. **Note:** It is assumed that 2 hours is sufficient time to bring the sample to constant weight.
   E. Remove samples from oven, cool to room temperature in desiccator, and reweigh to the nearest 0.001 g (W₃).
V. **CALCULATIONS.** Calculate the results as follows:

\[
\text{% NV} = \frac{W_2 - W_1}{W_3 - W_1} \times 100
\]

Where:

- **W**\(_1\) = Weight of dish in grams,
- **W**\(_2\) = Weight of dish and sample in grams,
- **W**\(_3\) = Weight of dish and sample after heating,
- NV = Non-volatile.

VI. **REPORT.** Average the results of the duplicate samples and report the non-volatile content to the nearest 0.1 percent.