

Procedure for Testing Linseed Oil Base Emulsion Curing Compound

1. Scope:

This test is for determining the oil and water phase composition of the linseed oil base emulsion compound for curing concrete.

2. Apparatus:

- 2.1 Scale or balance having the capacity to weigh any sample which may be tested utilizing this procedure and readable to the nearest 0.1 gram.
- 2.2 Drying oven capable of maintaining a temperature of $230^{\circ} \pm 9^{\circ}\text{F}$.
- 2.3 Muffle furnace capable of maintaining temperature at $1400^{\circ} \pm 50^{\circ}\text{F}$.
- 2.4 Crucible with a capacity of 20 grams.
- 2.5 Desiccator.

3. Procedure:

- 3.1 Weigh crucible (A).
- 3.2 Place a minimum of 10.0 grams sample in the crucible.
- 3.3 Weigh the material to the nearest 0.1 gram (B) and dry it to a constant weight as per SD 108.
- 3.4 Cool sample to room temperature in desiccator and weigh (C).
- 3.5 Place sample in the muffle furnace and heat to the above specified temperature. Then turn furnace off.
- 3.6 Leave sample in the muffle furnace until the sample reaches approximately 300°F .
- 3.7 Cool sample to room temperature in desiccator and weigh (D).

4. Report:

4.1 Calculate the oil and water phase:

$$\text{Water } E = (B - C)/(B - A) \times 100$$

$$\text{Oil } F = (C - D)/(B - A) \times 100$$

$$\% \text{ water phase} = E/(E + F) \times 100$$

$$\% \text{ oil phase} = F/(E + F) \times 100$$

4.2 Report % water phase and % oil phase results.

5. References:

SD 108