2101  Rock Salt Microwave Rapid Moisture Test

2101.1  Sampling – (ASTM D632)

Take a minimum of three sample increments from the load / pile by scraping off the top 1 inch of material and then by means of scoop or sample thief take approximately 500 g of material to a depth of 6 inches. The sample increments shall be combined and mixed thoroughly to constitute the composite sample of the load.

2101.2  Microwave Test Procedure (Mn/DOT Method)

1. Using a balance accurate to 0.1 g or better, weigh a microwave safe container and record weight as “Weight A”.
2. Weigh an approximately 100 g sample of salt into the weighed microwave safe container from the composite sample taken. Record weight as “Weight B”.
3. Microwave the sample on high for a period of 2 minutes. If the sample “pops” during heating restart the test.
4. Cool on the counter for 1 minute, weigh dried sample and record weight as “Weight C”.
5. Repeat steps 3 and 4 until sample weight changes 0.1 g or less.

2101.3  Microwave Method Calculation

Use the following formula to calculate the % moisture in the rock salt sample:

\[
\text{% moisture} = \frac{\text{Weight B} - \text{Weight C}}{\text{Weight B} - \text{Weight A}} \times 100
\]