

Iowa Department of Transportation

Office of Materials

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DETERMINING MOISTURE IN ROCK SALT

SCOPE

This method of test covers the procedure for determining the moisture content of rock salt when a drying oven is not available.

PROCEDURE

- A. Apparatus
 - 1. Balance having a capacity of 1000 grams or more and sensitive to 0.5 gram
 - 2. Metal pan, 9 in. (228.6 mm) minimum, flat
 - 3. Gas hotplate or drying stove
 - 4. Stirrer, such as spoon or spatula
- B. Test Procedure
 - 1. Weigh a 500- to 800-gram sample of rock salt, to the nearest 0.5 gram, into a tared metal pan. Avoid excessive handling or unnecessary delay in weighing the sample to prevent moisture loss.
 - 2. Dry the sample in the pan on the hot plate or stove to constant mass (weight). Control the heat applied to the sample to avoid spattering. Stir occasionally to speed the drying process.
 - 3. Cool the dried sample to room temperature and weigh to the nearest 0.5 gram.
- C. Calculation

% Moisture = $\frac{\text{Wet Sample Mass (Wt.) - Dry Sample Mass (Wt.)}}{\text{Dry Sample Mass (Wt.)}} \times 100$