Racing Surfaces Testing Laboratory

907 National Avenue
Lexington, KY 40502
207.570.9869

LABORATORY TEST METHOD FOR MOISTURE DETERMINATION OF DIRT MATERIAL (ASTM D2216)

1) Check that the **sample tin** is clean and free from holes.

2) Record the weight of the pan under “weight of container” using a **scale accurate to ±0.1g**.



3) If there are any holes in the bag the sample was received in, or if it is not completely sealed, make a note of that on the data sheet.

4) Scoop at least 200g of material into the pan. The material depth should not exceed 1.5”. Typically, the material mass should not exceed 1000 grams per sample tin (8” by 4”) to satisfy this condition.

5) Record the weight of the pan and wet material under “weight of container & wet sample.”



6) Put an **index card** in the sample tin which says the sample identifier and the date the sample was put in the oven. Write the word **moisture** on the index card.

7) Dry the sample for 24 hr in a temperature controlled **oven** at 110±2°C **if** there are no fibers. If there are fibers or a lot of organic in the sample, it must be dried at 80°C. A vacuum oven may be used to facilitate drying.

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8) Remove the index card from the pan and brush any material that may be stuck on the index card into the tin with your sample. Record the weight of the pan and the dry material under “weight of container & dry sample.” Cross out the word moisture on the index card to show that the material can now be used for other tests.

Revision No.	Date	Revision By	Description
1.0	17-MAR-2009	R. Beaumont	Created and issued procedure
1.1	31-MAY-2012	M. Segee	Clarified steps, included step to check pan for holes.
1.2	06-JUN-2013	M. Segee	Added cell labels from data sheet
1.3	6/26/13	M. Segee	Added information about sample labeleing.
1.4	9-Jul-2013	M. Segee	combined some steps into one step
1.5	26-Feb-2014	H. Babbitt	Added Pictures
1.6	11-Aug-2015	K. Introne	Updated to reflect current procedures
1.7	26-Feb-19	H. Adams	Update address and phone number
1.8	19-Mar-2025	M. Rockefeller	Update address