

Organic Application Note

Moisture and Ash in Animal Feeds

Sample Preparation

Animal feed samples may be analyzed as received. Moisture and ash may be determined simultaneously on the same sample using the TGA-601.

Steps Information

	Moisture	Ash
Covers:	Off	Off
Ramp Rate:	8	9
Ramp Time (h:m):	00:13	01:19
Hold Time (h:m):	00:25	00:50
S. Temp (°C):	25	135
E. Temp (°C):	135	850
Atmosphere:	Air	Air
Flow Rate:	High	Low

Equations

Moisture:	$((W[\text{Initial}]-W[\text{Moisture}])/W[\text{Initial}])*100$
Ash:	$(W[\text{Ash}]/W[\text{Initial}])*100$
Initial Weight:	$W[\text{Initial}]$

Procedure

Weigh up to 19 samples, 1 to 2 g each, directly into crucibles. Select the appropriate method and analyze.

Analysis Time ~3.5 hours

Typical Results

TGA-601 Results			CEM Values		
Sample	Moisture	Ash	Sample	Moisture	Ash
Feather Meal #1	7.858	1.521	Feather Meal #1	7.9	1.37
	7.831	1.535			
Feather Meal #2	8.955	1.408	Feather Meal #2	9.2	1.36
	9.055	1.336			
Poultry Meal/Low Ash #1	4.061	9.453	Poultry Meal/Low Ash #1	4.3	9.7
	4.043	9.709			
Poultry Meal/Low Ash #2	3.939	9.419	Poultry Meal/Low Ash #2	4.3	9.7
	3.923	9.415			
Poultry Meal/Regular #1	4.772	10.14	Poultry Meal/Regular #1	5.0	10.0
	4.794	10.16			
Poultry Meal/Regular #2	6.516	11.38	Poultry Meal/Regular #2	6.7	11.53
	6.519	11.05			



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