

Sample Categorization

For best results, it is important to determine the correct ratio of Diatomaceous Earth (DE) to sample. Before using your ANKOM^{HCI} Hydrolysis System for production testing, it is recommended that you categorize your samples into types and determine the standard amount of DE needed for each sample type. The following information is from testing done in the ANKOM lab. This information is meant to help you categorize your own samples.

Sample Categorization Data from ANKOM Lab (sorted in alphabetical order by Sample Type)

Sample Type	Fat %	DE Weight	Sample Weight	Notes
Yogurt	1 - 1.5 %	0.75 g	0.75 g	
Whole Milk	~ 3%	1.25 g	1.25 g	After adding the DE to the filter bag, press the eraser end of a pencil into the DE to create an indentation into which the milk can be added using a pipette. Record the weight (to make sure DE was not transferred to the pencil) & tare.
Whipping Cream	35%	1.25 g	0.5 g	After adding cream to the filter bag using a pipette (see milk technique above) and not overflowing the indentation in the DE, leave the filter bag open and dry it in an oven for 1 hour at 100-105°C. Seal the bag.
Whey Powder	2%	0.75 g	0.75 g	
Veggie Chips	20%	0.9 g	0.6 g	
Tortilla Chips	25%	0.9 g	0.6 g	
Swiss Cheese	30%	1.0 g	0.5 g	
Soybean	20%	0.75 g	0.75 g	
Sour Cream	20%	0.8 g	0.7 g	
Processed Cheese	20 - 25 %	1.0 g	0.5 g	
Processed Cheese	> 25 %	1.2 g	0.3 g	
Pretzels	5%	0.5	1.0 g	
Powdered Non-Dairy Creamer	35%	1.0 g	0.5 g	
Potato Chips	30 - 40 %	1.2 g	0.3 g	
Mozzarella Cheese	20%	1.0 g	0.5 g	
Moist Pet Food (canned)	< 10 %	0.75 g	0.75 g	
Moist Distillers Grain (syrup)	10 - 12 %	0.7 g	1.0 g	
Milk Replacer	> 30%	0.9 g	0.6 g	
Milk Replacer	20 - 30 %	0.75 g	0.75 g	
Milk Powder	15 - 20 %	0.75 g	0.75 g	
Milk Chocolate	25 - 30 %	0.8 g	0.7 g	
Meat & Bone Meal	10 - 15 %	0.5 g	1.0 g	
Mayonnaise	75 - 80 %	1.2 g	0.3 g	
Hot Dog	30%	1.2 g	0.3 g	
Ground Beef	< 20 %	1.0 g	0.5 g	
Ground Beef	> 20 %	1.2 g	0.3 g	
Forages	2 - 3 %	0.3 g	1.2 g	Most forages are light. Do not allow the mass in the bag to puff out the sides of the filter bag which will make it more difficult to completely saturate the sample.
Fish Feed	15%	0.75 g	0.75 g	
Feed Mixtures	< 10%	0.3 - 0.4 g	1.1 - 1.2 g	
Dried Pet Food	5 - 15 %	0.5 g	1.0 g	
Dried Distillers Grain	< 15 %	0.5 g	1.0 g	
Dried Algae	15 - 20 %	0.8 g	0.7 g	
Cream Cheese	15 - 35 %	1.0 g	0.5 g	
Cottage Cheese	< 5 %	0.6 g	0.9 g	
Chocolate Liquor	> 50 %	1.1 g	0.4 g	
Cheese Curls	~ 25 %	0.9 g	0.6 g	
Cheddar Cheese	35%	1.2 g	0.3 g	

Sample Categorization Data from ANKOM Lab (sorted by DE Weight)

Sample Type	Fat %	DE Weight	Sample Weight	Notes
Whole Milk	~ 3%	1.25 g	1.25 g	After adding the DE to the filter bag, press the eraser end of a pencil into the DE to create an indentation into which the milk can be added using a pipette. Record the weight (to make sure DE was not transferred to the pencil) & tare.
Whipping Cream	35%	1.25 g	0.5 g	After adding cream to the filter bag using a pipette (see milk technique above) and not overflowing the indentation in the DE, leave the filter bag open and dry it in an oven for 1 hour at 100-105°C. Seal the bag.
Processed Cheese	> 25 %	1.2 g	0.3 g	
Potato Chips	30 - 40 %			
Mayonnaise	75 - 80 %			
Hot Dog	30%			
Ground Beef	> 20 %			
Cheddar Cheese	35%			
Chocolate Liquor	> 50 %	1.1 g	0.4 g	
Swiss Cheese	30%	1.0 g	0.5 g	
Processed Cheese	20 - 25 %			
Powdered Non-Dairy Creamer	35%			
Mozzarella Cheese	20%			
Ground Beef	< 20 %			
Cream Cheese	15 - 35 %			
Veggie Chips	20%	0.9 g	0.6 g	
Tortilla Chips	25%			
Milk Replacer	> 30%			
Cheese Curls	~ 25 %			
Sour Cream	20%	0.8 g	0.7 g	
Milk Chocolate	25 - 30 %			
Dried Algae	15 - 20 %			
Yogurt	1 - 1.5 %	0.75 g	0.75 g	
Whey Powder	2%			
Soybean	20%			
Moist Pet Food (canned)	< 10 %			
Milk Replacer	20 - 30 %			
Milk Powder	15 - 20 %			
Fish Feed	15%			
Moist Distillers Grain (syrup)	10 - 12 %	0.7 g	1.0 g	
Cottage Cheese	< 5 %	0.6 g	0.9 g	
Meat & Bone Meal	10 - 15 %	0.5 g	1.0 g	
Dried Pet Food	5 - 15 %			
Dried Distillers Grain	< 15 %			
Pretzels	5%			
Forages	2 - 3 %	0.3 g	1.2 g	Most forages are light. Do not allow the mass in the bag to puff out the sides of the filter bag which will make it more difficult to completely saturate the sample.
Feed Mixtures	< 10%	0.3 - 0.4 g	1.1 - 1.2 g	