

Calibration Package

Petfood



The DA 7250 is used extensively in the petfood industry. Its accuracy, speed and flexibility make it especially suited for analysis of petfood ingredients and finished petfoods. This package includes calibrations for a range of raw materials and finished pet foods of varying types.

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Petfood calibrations

Product	Parameter	Samples	Range (%)	R	Sample prep.
Dogfood	Moisture	600+	4.0 - 10.8	0.93	None
	Protein	900+	12.6 - 35.7	0.97	None
	Fat	900+	1.8 - 36.4	0.97	None
	Fiber	200+	0.7 - 5.2	0.81	None
	Ash	200+	3.9 - 18.0	0.91	None
Catfood	Moisture	100+	2.4 - 11.0	0.97	None
	Protein	200+	19.1 - 44.5	0.98	None
	Fat	200+	8.2 - 24.2	0.97	None
	Fiber	200+	0.7 - 5.2	0.81	None
	Ash	200+	3.9 - 18.0	0.91	None
Petfood, wet (canned)	Moisture	1200+	59.2 - 84.5	0.85	None
	Protein	1200+	3.9 - 16.2	0.82	None
	Fat	1200+	1.7 - 14.7	0.89	None

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Grain calibrations

Product	Parameter	Samples	Range (%)	R	Sample prep.
Barley	Moisture	1500+	6.8 - 30.3	0.96	None
	Protein	1500+	6.4 - 15.8	0.88	None
	Starch	100+	43.1 - 60.2	0.81	None
	Fiber	200+	2.7 - 9.3	0.80	None
Corn	Moisture	2800+	7.4 - 37.6	0.99	None
	Protein	1700+	4.9 - 15.2	0.97	None
	Fat	1700+	2.2 - 13.5	0.97	None
	Starch	800+	48.2 - 67.9	0.80	None
Oats	Moisture	500+	7.7 - 25.8	0.97	None
	Protein	300+	8.4 - 16.5	0.94	None
	Ash	200+	1.2 - 10.6	0.79	None
	NDF	<100	21.4 - 36.2	0.79	None
	Fiber	100+	7.9 - 21.0	0.78	None
	Fat	100+	2.0 - 6.3	0.80	None
Rice, white polished	Moisture	200+	11.9 - 16.6	0.93	None
	Protein	800+	6.5 - 13.8	0.98	None
	Starch	<100	83.6 - 94.2	0.93	None
Peas	Moisture	<100	10.5 - 16.8	0.98	None
	Protein	<100	18.2 - 23.0	0.91	None
Sorghum/Milo	Moisture	200+	10.1 - 16.1	0.96	None
	Protein	200+	8.0 - 15.2	0.95	None
	Starch	100+	58.6 - 79.9	0.94	None
Wheat	Moisture	4000+	7.3 - 22.1	0.97	None
	Protein	4200+	8.2 - 22.8	0.98	None
	Starch	1200+	61.5 - 83.0	0.97	None
	NDF	<100	7.2 - 17.3	0.77	None

Grain-based products calibrations

Product	Parameter	Samples	Range (%)	R	Sample prep.
Corn gluten meal	Moisture	500+	3.8 - 16.3	0.92	None
	Protein	500+	42.0 - 72.3	0.93	None
	Fat	100+	1.9 - 11.3	0.94	None
	Fiber	<100	1.1 - 3.9	0.97	None
	Ash	<100	0.9 - 3.7	0.97	None
Corn grits	Moisture	800+	5.9 - 15.3	0.99	None
	Protein	500+	5.1 - 8.2	0.96	None
	Oil	900+	0.3 - 2.2	0.92	None
	Ash	500+	0.2 - 0.9	0.90	None
Rice bran, de-fatted	Moisture	<100	9.1 - 13.1	0.99	None
	Protein	<100	15.0 - 18.3	0.83	None
	Fat	<100	0.9 - 3.6	0.99	None
Rice bran, full fat	Moisture	100+	6.6 - 11.9	0.95	None
	Protein	100+	10.0 - 17.8	0.91	None
	Fat	100+	2.9 - 24.0	0.97	None
	Fiber	100+	3.1 - 12.9	0.93	None
Rice flour	Moisture	100+	8.1 - 13.0	0.96	None
	Protein	100+	4.4 - 8.8	0.91	None
	Fat	100+	0.1 - 2.4	0.86	None
	Ash	100+	0.1 - 1.2	0.94	None
Rice protein flour	Moisture	<100	4.3 - 6.6	0.60	None
	Protein	<100	58.5 - 85.6	0.97	None
	Fat	<100	0.3 - 9.7	0.96	None
	Ash	<100	0.6 - 2.6	0.88	None
Wheat bran and middlings	Moisture	200+	6.9 - 17.8	0.94	None
	Protein	200+	13.2 - 21.7	0.95	None
	Fat	200+	2.0 - 7.0	0.95	None
	Fiber	200+	2.3 - 13.0	0.95	None
	Ash	100+	2.3 - 6.9	0.93	None
	Starch	300+	12.5 - 38.7	0.88	None
Wheat gluten	Moisture	100+	4.5 - 7.6	0.96	None
	Protein	100+	67.2 - 77.9	0.98	None
Wheat flour	Moisture	400+	9.3 - 15.6	0.99	None
	Protein	400+	8.3 - 21.3	0.99	None
	Ash low	400+	0.38 - 0.99	0.99	None
	Ash high	500+	0.38 - 2.11	0.98	None
	Dry gluten	400+	3.9 - 18.9	0.99	None
	Wet gluten	400+	12.3 - 51.8	0.99	None

Oilseed products calibrations

Product	Parameter	Samples	Range (%)	R	Sample prep.
Canola/rapeseed expeller	Moisture	900+	1.5 - 15.3	0.98	None
	Protein	800+	28.0 - 40.1	0.97	None
	Fat	700+	0.9 - 15.3	0.98	None
	Fiber	200+	6.7 - 14.7	0.95	None
	Ash	100+	5.2 - 7.2	0.95	None
Cottonseed hulls	Moisture	200+	5.2 - 9.7	0.97	None
	Protein	200+	3.2 - 20.0	0.96	None
	Fat	200+	0.7 - 4.6	0.96	None
	Fiber	200+	25.4 - 52.6	0.96	None
Cottonseed meal	Moisture	200+	7.1 - 17.3	0.97	None
	Protein	200+	30.9 - 46.3	0.97	None
	Fat	200+	5.2 - 8.6	0.98	None
	Fiber	100+	7.2 - 18.5	0.95	None
Soymeal	Moisture	1700+	9.2 - 14.6	0.91	None
	Protein	2200+	41.1 - 51.6	0.97	None
	Fat	1600+	0.2 - 3.3	0.90	None
	Fiber	1300+	1.8 - 10.2	0.94	None
	Ash	500+	5.4 - 7.5	0.68	None
Soy hulls	Moisture	400+	4.0 - 16.5	0.99	None
	Protein	100+	9.3 - 20.2	0.98	None
	Oil	300+	0.6 - 5.3	0.97	None
	Fiber	100+	27.5 - 41.3	0.95	None
Sunflower meal	Moisture	300+	4.8 - 13.6	0.93	None
	Protein	300+	22.7 - 40.6	0.96	None
	Fat	200+	0.5 - 19.8	0.98	None
	Fiber	100+	12.8 - 26.9	0.88	None
	Ash	<100	5.2 - 9.5	0.89	None
Vegetable oils	FFA	300+	0.1 - 7.6	0.94	None
	Phosphorus (ppm)	200+	1 - 359	0.92	None

Animal based products calibrations

Product	Parameter	Samples	Range (%)	R	Sample prep.
Meat (<i>Raw meat and by-products from beef, pork, poultry and fish</i>)	Moisture	800+	43.3 - 88.7	0.91	Homogenizing
	Protein	800+	4.0 - 22.8	0.86	Homogenizing
	Fat	900+	0.1 - 44.0	0.91	Homogenizing
Meat and bone meal	Moisture	1500+	1.0 - 9.1	0.98	None
	Protein	1500+	38.7 - 69.2	0.97	None
	Fat	1500+	5.6 - 22.7	0.97	None
	Ash	1500+	4.2 - 42.5	0.97	None
Poultry meal	Moisture	1400+	1.5 - 6.9	0.98	None
	Protein	1200+	49.5 - 73.5	0.97	None
	Fat	1500+	8.1 - 21.8	0.97	None
	Ash	1600+	5.1 - 30.0	0.96	None
Feather meal	Moisture	400+	0.1 - 11.5	0.98	None
	Protein	200+	72.3 - 93.8	0.97	None
	Fat	400+	2.7 - 17.5	0.92	None
	Ash	400+	1.0 - 4.2	0.69	None
Fishmeal	Moisture	1000+	4.8 - 10.0	0.97	None
	Protein	1000+	55.8 - 70.7	0.96	None
	Fat	1000+	6.9 - 12.4	0.92	None
	Ash	1000+	13.1 - 25.3	0.94	None
	TBVN (mg/100g)	800+	58.4 - 193.0	0.93	None
	Histamine (ppm)	300+	79 - 3995	0.93	None
	FFA	100+	4.0 - 7.0	0.85	None
	Chlorides	300+	2.4 - 4.7	0.83	None
	Acidity	100+	4.7 - 8.6	0.85	None
Fish oil	Moisture	100+	1.6 - 12.0	0.83	None
	Acidity	<100	1.8 - 13.8	0.95	None

NIR is an indirect method and the actual accuracy will depend on the accuracy of the reference method which is used for comparison with the DA 7250. For most products and parameters a typical accuracy would be 1-1.5 times the accuracy of the reference method.