

Adkins Energy LLC
Lena, Illinois

IOWA TESTING LAB REPORT NO: not available
DATE: unknown
REC'D DATE: unknown
METHOD: AOAC; ICP; MOD/AOAC

PROXIMATE ANALYSIS, CALCULATED DE, ME AND NE VALUES FOR SWINE, AND MINERAL AND AMINO ACID CONTENT OF DDGS.¹

Proximate Analysis:

| Dry Matter (%) | Crude Protein (%) | Crude Fat (%) | AH Fat (%) | Crude Fiber (%) | Ash (%) | Nitrogen Free Extract (%) | Carbohydrates (%) | Acid Detergent Fiber (%) | Total Digestible Nutrients (%) | Digestible Energy ² (kcal/kg) | Metabolizable Energy ² (kcal/kg) | Net Energy ³ (kcal/kg) |
|----------------|-------------------|---------------|-----------------|-----------------|---------|---------------------------|-------------------|--------------------------|--------------------------------|--|---|-----------------------------------|
| 87.79 | 28.33 | 10.96 | ND ⁴ | 7.86 | 4.98 | 47.99 | 55.85 | 15.61 | 87.16 | 4108 | 3876 | 2107 |

Mineral Analysis:

| Calcium (%) | Phosphorus (%) | Potassium (%) | Magnesium (%) | Sulfur (%) | Sodium (%) | Chloride (%) | Zinc (ppm) | Manganese (ppm) | Copper (ppm) | Iron (ppm) |
|-------------|----------------|---------------|---------------|------------|------------|-----------------|------------|-----------------|--------------|------------|
| 0.02 | 0.79 | 1.33 | 0.31 | 0.31 | 0.26 | ND ⁴ | 47 | 13 | 6 | 68 |

Amino Acid Analysis:

| Arginine (%) | Histidine (%) | Isoleucine (%) | Leucine (%) | Lysine (%) | Methionine (%) | Cystine (%) | Phenylalanine (%) | Threonine (%) | Tryptophan (%) | Valine (%) |
|--------------|---------------|----------------|-------------|------------|----------------|-------------|-------------------|---------------|----------------|------------|
| 1.30 | 0.77 | 1.06 | 3.20 | 0.90 | 0.59 | 0.58 | 1.39 | 1.05 | 0.21 | 1.44 |

¹ Nutrient values expressed on 100% dry matter basis.

² DE (for swine) = 4,151 – (122 x % Ash) + (23 x %CP) + (38 x %Fat) – (64 x %Crude Fiber); ME (for swine) = DE x [1.003 - (0.0021 x %CP)], Noblet and Perez (1993).

³ NE (for swine) = 328 + (0.599 x ME) – (15 x %Ash) – (30 x %ADF), Ewan (1989).

⁴ ND = not determined.

APPARENT AND STANDARDIZED TRUE ILEAL DIGESTIBILITY OF CRUDE PROTEIN AND AMINO ACIDS OF DDGS FOR SWINE (100% DRY MATTER BASIS).

| | DM | CP | Agr | His | Ile | Leu | Lys | Met | Phe | Thr | Trp | Val | Ala | Asp | Cys | Glu | Gly | Pro | Ser |
|-----------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| TOTAL, % | 91.2 | 34.27 | 1.55 | 0.93 | 1.25 | 3.93 | 1.08 | 0.66 | 1.65 | 1.29 | 0.30 | 1.70 | 2.51 | 2.29 | 0.62 | 5.89 | 1.38 | 3.00 | 1.63 |
| AID¹, % | | 68.05 | 78.52 | 76.19 | 74.63 | 84.67 | 61.21 | 82.37 | 79.32 | 64.16 | 57.28 | 73.46 | 78.38 | 66.14 | 67.42 | 82.66 | 48.40 | 49.77 | 71.50 |
| A DIG², % | | 23.32 | 1.22 | 0.71 | 0.93 | 3.32 | 0.66 | 0.54 | 1.31 | 0.83 | 0.17 | 1.25 | 1.96 | 1.51 | 0.42 | 4.87 | 0.67 | 1.49 | 1.16 |
| SID³, % | | 79.42 | 87.75 | 79.10 | 77.79 | 86.35 | 64.09 | 83.90 | 83.39 | 72.03 | 65.76 | 77.39 | 82.91 | 71.62 | 71.16 | 85.23 | 79.76 | 118.22 | 78.61 |
| S DIG⁴, % | | 27.22 | 1.36 | 0.74 | 0.97 | 3.39 | 0.70 | 0.55 | 1.38 | 0.93 | 0.20 | 1.32 | 2.08 | 1.64 | 0.44 | 5.02 | 1.10 | 3.54 | 1.28 |

| | NDF, % | ADF, % | ADICP ⁵ , % | Mean particle size, µm | Soluble CP, % | Ash, % | Bulk density, lbs/ft3 | pH |
|--------------|-----------|-----------|---------------------------|------------------------------|------------------|-----------|-----------------------------|------|
| OTHER | 25.76 | 9.39 | 2.67 | 674.54 | 23.67 | 4.24 | 29.28 | 4.30 |

¹ AID = Apparent Ileal Digestibility

² A DIG = Apparent Ileal Digestible CP & Amino Acids

³ SID = Standardized True Ileal Digestibility

⁴ S DIG = Standardized True Ileal Digestible CP & Amino Acids

⁵ ADICP = Acid Detergent Insoluble Crude Protein



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