



PRODUCT DATA SHEET

FULL-FAT TOASTED & EXTRUDED SOYBEANS

Protein and energy in one ingredient for piglet and pig diets

Product description

Full-fat soybeans processed by controlled toasting and extrusion. The ingredient combines protein, endogenous soybean oil and essential amino acids in one raw material. Processing improves nutrient accessibility and reduces anti-nutritional activity; residual levels are not quantified in the supplied specification.

Key nutritional benefits

- + Energy-dense ingredient: 203 g/kg crude fat; specified net energy 12.7 MJ/kg.
- + Digestible amino acids: 358 g/kg crude protein and 18.2 g/kg SID lysine.
- + Measured oil utilisation: 91% faecal fat digestibility in growing-finishing pigs.
- + One combined ingredient: Protein and soybean oil delivered together.

Research highlights

Schothorst Feed Research (2011) measured 13.05 MJ/kg net energy and 91% fat digestibility in 60-85 kg pigs, compared with historical CVB reference values of 11.98 MJ/kg and 85%. Protein digestibility was 88% for both.

Feed Innovation Services (2016) tested 12.5% extruded soy in prestarter and 17.5% in starter. Piglet growth was numerically 379 versus 366 g/day for control; differences in performance were not statistically significant.

At a glance

KEY PARAMETER	PER KG
Crude protein	358 g
Crude fat	203 g
SID lysine	18.2 g
Net energy, pigs	12.7 MJ

Research vs specification

12.7 MJ/kg product specification
 13.05 MJ/kg 2011 study result
 91% measured faecal fat digestibility
 Study outcomes are not batch guarantees.

Feeding guidance

Piglets: 7-15% of complete ration (product guidance).
 Sows: 10-15% (product guidance).

The piglet trial tested 17.5% in starter; this is a study inclusion level, not a universal optimum.



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NUTRITIONAL SPECIFICATION

Typical composition per kg product | as-fed basis

Chemical analysis

PARAMETER	VALUE
Dry matter	900 g
Crude protein	358 g
Crude fat	203 g
Crude fibre	61 g
Crude ash	46 g
Starch	63 g
Sugar	76 g
NSP	216 g
Linoleic acid	106 g
Carbohydrates (OKH)	234 g

Minerals and energy

PARAMETER	VALUE
Calcium	2.0 g
Phosphorus	5.2 g
Digestible P, pigs	2.1 g
Sodium	0.1 g
Potassium	17.4 g
Chloride	0.3 g
Magnesium	3.3 g
Net energy, pigs	12.7 MJ
Study net energy (2011)	13.05 MJ

Amino acids: total and SID for pigs

AMINO ACID	TOTAL / KG	SID / KG
Lysine	22.5 g	18.2 g
Methionine	5.1 g	4.3 g
Methionine + cystine	10.5 g	7.9 g
Threonine	14.2 g	10.9 g
Tryptophan	4.7 g	4.0 g

Research interpretation and formulation notes

The 2011 comparator is a historical feed-table reference, not a concurrent control. The 2016 piglet trial found no statistically significant differences in growth, intake or feed conversion. The supplied product specification does not include a complete essential SID amino-acid matrix. Values above are typical, not lot-specific guarantees.

Sources: supplied product specification; Schothorst Feed Research (2011); Feed Innovation Services (2016). Store cool and dry.