

## Product Description

The BioExx isolated canola protein **Advantexx™ 80** is made from non-GMO Juncea-variety Canola seed through coupling true cold oil pressing and our proprietary enzyme-assisted fully aqueous protein isolation technology. Advantexx™ 80 may be used in either human food products including:

- >> Human food products :
  - > Bakery products
  - > Meat products
  - > Vegetarian food products and meat analogues
  - > Nutritional and high protein bars, drinks and supplements

## Technical Data

Advantexx™80 canola protein is of high nutritional quality and capable of providing adequate amounts of all essential amino acids.

- >> Complete protein – PDCAAS ≥ 1.0 (ref. FAO 2007)
- >> Uniquely high in both lysine and sulphur containing amino acids compared to other vegetable proteins.
- >> >40% higher in the sulfur containing amino acids (methionine + cysteine) than typical soy protein and 75% higher than typical pea protein.
- >> Rich in the muscle building branched-chain essential amino acids (valine, leucine, and isoleucine)
- >> Free of phytoestrogens.
- >> Non-GMO, natural product.

## Functional Properties

Advantexx™80 canola protein has unique functional properties including:

- >> Excellent water solubility as compared to soy and pea proteins.
- >> Excellent emulsifying and foaming properties as compared to whey proteins and egg yolk.
- >> Performs particularly well in the applications requiring emulsifying and foaming.
- >> Excellent gel forming property and gel firmness.

**ADVANTEXX™80 Typical Analysis**

| Physical Description         |                        | As Is                |         |
|------------------------------|------------------------|----------------------|---------|
| Appearance                   | Spray Dried Tan Powder |                      |         |
| Flavour                      | Mild                   |                      |         |
| pH                           | 7 ± 0.5                |                      |         |
| Solubility                   | >60% @1g/100ml pH7     |                      |         |
| Proximate Analysis           |                        | Minimum              | Typical |
| Protein (Leco nx6.25)        | >73% as is<br>>80% dwb | 80% as is<br>83% dwb |         |
| Moisture                     | <7%                    | 5%                   |         |
| Ash                          | <4%                    | 3.2%                 |         |
| Fat (AOCS Ba 38)             | <2%                    | <2%                  |         |
| Crude Fiber                  | <0.5%                  | <0.1%                |         |
| Microbiological Profile      |                        |                      |         |
| Standard Plate Count [cfu/g] | <10,000                | <1,000               |         |
| E.coli                       | Negative               | Negative             |         |
| Salmonella                   | Negative               | Negative             |         |
| Nutritional Data             |                        |                      |         |
| Saturated Fat                | 0.0%                   |                      |         |
| Cholesterol                  | 0.0%                   |                      |         |
| Trace Components             |                        | Minimum              | Typical |
| Total Glucosinolates         | <1 µmol/g              | <0.2 µmol/g          |         |

| Typical Amino Acids        | (G/100G Protein) |
|----------------------------|------------------|
| Alanine                    | 4.5              |
| Arginine                   | 7.6              |
| Aspartic Acid              | 10               |
| Cysteine                   | 2.2              |
| Glutamic Acid              | 19.4             |
| Glycine                    | 5.3              |
| Histidine <sup>†</sup>     | 3.5              |
| Isoleucine <sup>†</sup>    | 4.0              |
| Leucine <sup>†</sup>       | 7.3              |
| Lysine <sup>†</sup>        | 5.7              |
| Methionine <sup>†</sup>    | 2.1              |
| Phenylalanine <sup>†</sup> | 4.1              |
| Proline                    | 5.6              |
| Serine                     | 4.7              |
| Threonine <sup>†</sup>     | 4.6              |
| Tryptophan <sup>†</sup>    | 1.3              |
| Tyrosine                   | 3.3              |
| Valine <sup>†</sup>        | 4.9              |

Sulfur amino acids

<sup>†</sup> essential amino acids.

**Granulation**

Min 50% through #80 mesh U.S. Standard Screen

**Packaging**

Available in 20 kg (44 lb.) net weight, multi-wall, poly-lined paper bags. Custom packaging available.

**Storage**

Recommend shelf life is 12 months from date of manufacture if stored below 25°C (75°C F) and 60% relative humidity