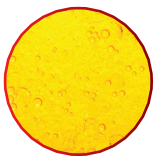
ASTON
foods and food ingredients

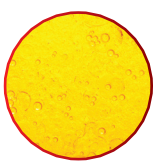
ASTON is a major Russian manufacturer and supplier of vegetable oils. The company's product line includes refined and unrefined sunflower oil, high oleic sunflower oil, rapeseed and linseed oil, as well as cakes and meals.



SUNFLOWER OIL REFINED

Main quality indicators:

- color value is not more than 2 mg. iodine
- acid number is not more than 0.4 (KOH) mg/g
- mass fraction of nonoleaginous impurities - none
- mass fraction of phosphorus substances, in terms of stearo-oleo-lecithin - none
- mass fraction of moisture and volatile substances - none
- peroxide number is not more than 2 mmol of active oxygen/kg



SUNFLOWER OIL UNREFINED

Main quality indicators:

- color value is not more than 25 mg. iodine
- acid number is not more than 4 (KOH) mg/g
- mass fraction of nonoleaginous impurities is not more than 0.10 %
- mass fraction of phosphorus substances, in terms of stearo-oleo-lecithin is not more than 0.7 %
- mass fraction of moisture and volatile substances is not more than 0.20 %
- peroxide number is not more than 10 mmol of active oxygen/kg



SUNFLOWER OIL HIGH OLEIC

Main quality indicators:

- color value is not more than 20 mg. iodine
- acid number is not more than 4 (KOH) mg/g
- mass fraction of nonoleaginous impurities is not more than 0.10 %
- mass fraction of phosphorus substances, in terms of stearo-oleo-lecithin is not more than 0.6 %
- mass fraction of moisture and volatile substances is not more than 0.20 %
- mass fraction of oleic acid C18:1 is not less than 80%
- peroxide number is not more than 10 mmol of active oxygen/kg



SUNFLOWER MEAL (GRANULATED AND NON-GRANULATED)

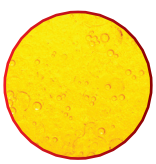
The product contains 36-38% of crude protein, amino acids and methionine, vitamins E and B, fiber, natural proteins, potassium, phosphorus and other minerals.

Main quality indicators:

- mass fraction of moisture and volatile substances is 8-12 %
- mass fraction of crude protein in terms of absolute dry matter substance is not less than 38%
- mass fraction of crude fiber in terms of absolute dry matter substance is not more than 23%
- mass fraction of crude fat in terms of absolute dry matter substance is not more than 4%
- total energy nutritional value is not less than 0.918 feed units
- density of granulated sunflower meal is 550-630 kg/m3
- density of non-granulated sunflower meal is 430-480 kg/m3

Packing/container: in bulk

Sunflower meal is certified and complies with the manufacturer's company standard «Sunflower meal. Specifications». Accompanied by a veterinary certificate, a quarantine certificate, a certificate of conformity and a quality certificate.



LINSEED OIL

Linseed oil has a premium positioning in the vegetable oil market due to its high content of wholesome Omega-3 fatty acids. Over the past ten years, the world has seen a steady increase in demand for this product.

Linseed oil use:

- Food industry
- Fish and animal feeds
- Paint industry
- Manufacturing of painter's paints and printing inks
- Pharmaceutical manufacturing
- Cosmetics manufacturing
- Linoleum manufacturing
- Detergents manufacturing

Parameters of linseed unrefined oil:

- Acid number is 4 (KOH) mg/g max
- Insoluble matter is 0.5% max
- Moisture and volatile matter is 0.20% max
- Iodine number is 175 min
- Color (Lovibond) is 13 red, 79 yellow max
- Peroxide number (mmol/kg) is 7.5 max
- Linolenic acid (C18:3) is 49% min
- Phosphorus (PPM) is 250 max
- Lead (PB) is 0.1 max
- Arsenic (AS) is 0.1 max
- Sediments are 0.5% max

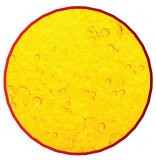


LINSEED CAKE

Linseed cake is a valuable fodder product.
Its main advantages include a high content of easily digestible proteins, carbohydrates and fiber, a high residual content of vegetable-based Omega-3, which is comparable to fish oil in biological value.

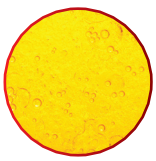
Linseed cake is a main ingredient in the diets of dairy herds, horses, pigs, as well as the most important ingredient in the feed of salmon and carp family industrial fish.

- Protein is 34% / 37% min on in terms of absolute dry matter
- Residual oil content is 7% min
- Fiber is 10% max
- Moisture is 9% max



RAPESEED OIL REFINED

- Color value is I2 – 5 mg
- Acid number is 0.4 mg KOH/g max
- Peroxide number is 0.1 ½ mmol O/kg
- Mass fraction of erucic acid is 0.1%



RAPESEED OIL UNREFINED

- Acid number is 3 (KOH) mg/g max
- Insoluble matter is 0.1% max
- Moisture and volatile matter is 0.20% max
- Peroxide number is 0.25 g/100 g
- Phosphorus (PPM) is 400 max
- Lead (PB) is 0.1 max
- Arsenic (AS) is 0.1 max



RAPESEED MEAL

Rapeseed meal contains riboflavin, folic acid, thiamine, natural antioxidants tocopherol (vitamin E), phenolic compounds.

Main quality indicators:

- mass fraction of moisture and volatile substances is 8-12 %
- mass fraction of crude protein in terms of absolute dry matter substance is not less than 38%
- mass fraction of crude fiber in terms of absolute dry matter substance is not more than 16 %
- mass fraction of crude fat in terms of absolute dry matter substance is 4%
- total energy nutritional value is not less than 0.6 feed units
- density of granulated rapeseed meal is 650-720 kg/m3

Packing/container: in bulk

Rapeseed meal is certified and complies with the manufacturer's company standard «Rapeseed meal. Specifications».Accompanied by a veterinary certificate, a quarantine certificate, a certificate of conformity and a quality certificate.



RAPESEED CAKE

Rapeseed cake with a low content of erucic acid, contains a large amount of minerals. The use of rapeseed cake in dairy cattle husbandry leads increases the final product quantitative and qualitative indicators, i.e., increased are the milk yield and protein composition. In addition, rapeseed cake is becoming very popular in hog breeding, namely in feeding livestock, as it contributes to the active growth of young animals.

- Protein is 33% / 36% min on in terms of absolute dry matter
- Residual oil content is 7% min
- Fiber is 12% max
- Moisture is 9% max



LECITHIN

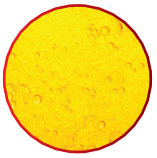
Lecithin is a mixture of natural substances based on phospholipids extracted by physical methods from unrefined sunflower oil during hydration and subsequent vacuum drying.

Main quality indicators:

- mass fraction of substances insoluble in acetone is not less than 60%
- mass fraction of substances insoluble in hexane is not more than 2%
- color value in 10% hexane solution, not more than 80 mg iodine
- mass fraction of moisture and volatile substances is not more than 3 %
- acid number is not more than 36 mg KOH/g
- peroxide number is not more than 25 mol of active oxygen/kg

Packing/container: cardboard drums with a polyethylene insert/filling.

The product undergoes strict quality control and complies with the company standard 86278130-006-2011, accompanied by a quality certificate.



SUNFLOWER OIL FATTY ACIDS

According to its **characteristics**, it is a transparent mixture, which, when heated, turns into an oily composition. The product has a specific smell, freezes at temperatures below 15 degrees centigrade, but returns all characteristics when heated.

The product is used in the manufacture of detergents and cosmetics, in the textile industry, in the petrochemical industry, including the production of plastics, in the construction industry, agriculture and many other areas. All manufactured products undergo thorough quality control and compliance with the requirements of applicable norms and standards.