

	QUALITY SPECIFICATION		IKD: II.– ŠpK – 01e
	CORN Qualitative parameters of the raw material for the production of bioethanol and DDGS		Issue: 5.
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			Valid from: 17th May 2024

Corn seed must meet provisions of the Regulation (EC) of the European Parliament and of the Council No 183/2005 as amended by regulations on feed materials and these quality parameters:

Moisture	max. 14.0% of weight
Total defined impurities:	max. 1.0% of weight
of which: mouldy seeds	max. 0.2% of weight
Grain starch content	min. 62.0% of weight
Specific weight	min. 710 g/l
Broken seeds	max. 8.0% of weight
pH	min. 5,5

The “defined” impurities are as follows:

1. complete drop through a sieve with circular openings 2 mm in diameter;
2. as a proportion left above a sieve with circular openings 2 mm in diameter:
 - inorganic impurities (earth, sand, stones etc.);
 - organic impurities (chaffs, cobs, leaves, etc.);
 - seeds of all cultivated and wild plants with the exception of cereals (wheat, barley, rye, triticale)
 - mouldy seeds

Health safety

1. Corn grain must be healthy, ripe, free from live pests, and **without foreign odors**. They must not contain moldy or mold-infested grains (more than 0.2%) and immature grains at the milk stage of ripeness.
2. Corn cannot be treated with preservatives based on organic acids (such as lactic acid, propionic acid, succinic acid, acetic acid, and others) during cultivation, harvesting, processing, or storage
3. The amount of foreign contaminants in corn grain must meet effective legal regulations (heavy metals, residues of plant protection products and other undesirable substances).
4. The required permissible amounts of individual mycotoxins in corn grain are:

MYCOTOXINS	Required values in µg/kg*
Deoxynivalenol (DON)	3,200
Zearalenone (ZEA)	700
Fumonisin (B1, B2, B3)	16,000
Aflatoxins (B1, B2, G1, G2)	5

* calculated for 12% moisture

Transport requirements

1. Only hygienically clean vehicles for the transport of grains.
2. All transport vehicles, whether directly owned or hired, transporting materials in bulk (grains) must be regularly cleaned and disinfected, and no residues from a previous load may remain in the transport containers or tank trailers.
3. The transported raw material must be protected against adverse weather conditions.

Required documentation

1. GMO declaration – written declaration or protocol that the delivered corn does not contain genetically modified organisms.
2. Protocol of the test issued by an accredited laboratory - or a statement from the supplier that the raw material complies with the limits of undesirable substances according to the Regulation of the Government of the Slovak Republic No. 438/2006 Coll. on undesirable substances in feed and other indicators of safety and usability of feed, as amended (mycotoxins, heavy metals, pesticide residues, etc.)
3. Record of treatment of stored corn – document containing data about each and every treatment that was carried out during the period of corn storage as well as the description of substances and products used for this treatment.

Other

The grower complies with the requirements of proper agricultural practices (in accordance with Government Regulation No 389/2005 Coll. on proper agricultural practices) and can provide documents tracking the origin of the corn.