 Leopoldov Reg. No.: SK 400078	QUALITY SPECIFICATION		IKD: II. ŠpK – 10 a
	13.8.1 CRUDE GLYCEROL FROM BIODIESEL PRODUCTION Feed material STN EN ISO 9001:2009 – Article 8.2.4		Edition: 7
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Raw material description: by-product of MERO biodiesel production (fatty acid methyl ester) obtained by the transesterification of fatty acid triglycerides originating by replacement of propantriol with methanol. The product is subsequently cleaned from residues of fatty acids and concentrated by evaporation of water and residual methanol.

Instruction for use: as fodder raw materials with limited use - maximum daily limit is *1.5 g/kg of live weight*

Minimum usable life: 6 months from the production date when observing storage conditions

Raw material: Rape-seed oil is preferentially used for the production, but other vegetable oil, animal fats of category 3 can also be used.

Quality requirements

Glycerol must meet requirements specified in the table:


Parameters	Limit values	Testing method
Glycerol content	min 82 %	STN ISO 1066 / AOCS Ea 6-94
Ash content	max 6 %	AOCS 2-38 / PP-M-08/08
Ash insoluble in HCL	max 2.2 %	Decree of Ministry of Agriculture of SR 1497
Sodium content	max 4 %	Decree of Ministry of Agriculture of SR 1497
Potassium content	max 1.8 %	Decree of Ministry of Agriculture of SR 1497
Methanol content *)	max 0.2 %	STN EN 14 110
Water content	max 13 %	STN EN ISO 12937
*M.O.N.G. content:	max 2.5 %	*M.O.N.G. = 100 – a – b – c – d – e – f
a) Glycerol content		AOCS Ea 6-94
b) Methanol content		STN EN 14 110
c) Ash content		AOCS 2-38 / PP-M-08/08
d) Ethylene content		PP-M-16/08
e) Water content		STN EN ISO 12937
f) NaOH content		AOCS Ea 2-38
Non-volatile organic compounds	max 1.5 %	

*) Maximum content of 0.2% of methanol must be observed in mixtures containing glycerine from the biofuel production.

Treatment: without any treatment

To be completed only in case of a change

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Organoleptic properties:

Appearance: liquid

Colour: brown

Odour: natural, typical for the given product, without foreign smell.

Harmless to health

1. The fodder raw material must be harmless to health, without any foreign smells.
2. Quantity of undesired substances in the fodder raw material (heavy metals, pathogenic germs and others) must be in accordance with the valid legal regulations – Decree of the Slovak government No. 438/2006 Coll. on undesired substances in fodders and on other indicators of safety and usability of fodders as amended, Regulation No. 575/2011 of the European Commission.

Storage:

In dry and clean, closed vessels/tanks at temperature of min 15 °C and max. 60 °C. Requirements for material: stainless steel, carbon steel for short-term storage, plastics and composite materials suitable for contact with foods and fodders.

Method of packaging: transports tank/container

Sampling and laboratory testing: Shall be carried out according to methodologies specified in Decree of the Ministry of Agriculture No. 1497/4/1997-100 as amended.

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