

This product has been produced by: **Viterra Botlek B.V.** *Reg(EG) no. 183/2005*
Welplaatweg 108 *Approval of feed business*
NL – 3197 KS Rotterdam *establishment*
The Netherlands *α NL 212931*

Sample: Refined glycerine, min 99.7 %, EP/USP grade, any vegetable oil based, non-GMO, E422 food grade (OU)-Kosher

Einecs: 200-289-5 CAS: 56-81-5

Taken from: 07F18A

Batch dated: 26-10-2021

Batch number: 202143207F18A

Production date: 26-10-2021

Remarks: 0

Analysis	Unit	min	max	Result	Method of analysis
Appearance		Colourless		Colourless	European Pharmacopoeia
Appearance of solution		Clear		pass	European Pharmacopoeia
Smell		Absent		absent	European Pharmacopoeia
Esters	ml 0.1 m HCl-solution	8,0		8,989	European Pharmacopoeia
Color (APHA)	Hazen		10	9	ISO 6271
Water	% (m/m)		0,3	0,028	European Pharmacopoeia
Refractive index @ 20°C		1,471	1,474	1,4739	European Pharmacopoeia
Density @ 20°C	g/cm ³	1,260		1,261	European Pharmacopoeia
Acidity	ml 0.1 m NaOH-solution		0,2	0,04	European Pharmacopoeia
Aldehydes	mg/kg		10	Passes test	European Pharmacopoeia
Halogenated compounds	mg/kg		30	Passes test	European Pharmacopoeia
Chlorides	mg/kg		10	Passes test	European Pharmacopoeia
Sugars		Negative		Negative	European Pharmacopoeia
Acroleine, Glucose, Ammoniumcompounds		Negative		Negative	REG(EU) 231/2012 no E422
Assay	% (m/m)	99,7		99,7	European Pharmacopoeia
3-MCPD	mg/kg		0,1	<0,05	GC/MS

Compliance with the items listed below is assured through regular monitoring analyses performed at an external lab.

Identity A, B, C, D		pass		European Pharmacopoeia
Heavy metals calculated as Pb	mg/kg	max 5		US Pharmacopoeia
Arsenic	mg/kg	max 3		DIN EN 15763
Mercury	mg/kg	max 0,1		SOP M 2567
Cadmium	mg/kg	max 1		DIN EN 15763
Lead	mg/kg	max 2		DIN EN 15763
Nickel	mg/kg	max 20		DIN EN 15763
Sodium	% (m/m)	max 0,1		DIN EN 15510
Potassium	% (m/m)	max 0,1		DIN EN 15510
Sulfates	mg/kg	max 20		US Pharmacopoeia
Sulphated ash	% (m/m)	max 0,01		European Pharmacopoeia
Impurity A (DEG)	% (m/m)	max 0,1		European Pharmacopoeia
Any other impurity retention time less Glyc	% (m/m)	max 0,1		European Pharmacopoeia
Total of all impurities retention time greater Glyc	% (m/m)	max 0,5		European Pharmacopoeia
Butanetriols	% (m/m)	max 0,2		GC/MS
Acroleine		Confirms		REG(EU) 231/2012 no E422
Fatty acids and esters	%	max 0,1		Calculated as butyric acid

Remarks:

* As legal rules for food and Pharma require different limits the single parameters Pb, Cd, As, Hg are mentioned in the CoA only.

** Or verified alternative method.

This product is manufactured according to FSSC:22000 standards and complies with the requirements of the latest version of the European Pharmacopoeia, USP, the requirements of the EU food legislation for the food additive Glycerol (E422), the requirements of the EU feed legislation 68/2013 (Catalogue of feed materials) and the Codex Alimentarius. For further information see separate Product data sheet in the most recent version

The shelf life of Viterra glycerine is 24 months EXW (date at Weight Certificate decisive) when stored and handled under appropriate conditions (see MSDS or Product Datasheet).

We declare to the best of our knowledge the product is not subject to mandatory labelling, with observation of all legal and customary duties of care (DIR 1830/2003/EC (labelling & traceability) and 1829/2003/EC (genetically modified food & feed)).

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28.10.21