

Product specification

Glycerine

acc. to EP USP E422 99,5 %
vegetable glycerine GMO free - kosher - halal

Parameter	Dim		Limits EP/USP/E422	VERBIO Glycerine	Method
appearance and appearance of solution			meets test	meets test	EP 8.8/0496
glycerine content	%	min	98,0	99,5	EP 8.8/0496
identification A.C.D			meets test	meets test	EP 8.8/0496
impurity A and related substances			meets test	meets test	EP 8.8/2.2.28
water	%	max	2,0	<0,1	EP 8.8/2.5.12
colour (APHA)		max	10	10	ISO 2211
relative density 20 / 20 °C		min	-	1,262	EN ISO 12185
refractive index n_D^{20}			1,470-1,475	1,471-1,474	EP 8.8/2.2.6
alkalinity or acidity	ml of 0,1 N NaOH	max	0,2	0,2	EP 8.8/0496
ester content	ml of 0,1 N HCl	min	8,0	8,0	EP 8.8/0496
chlorides	mg/kg	max	10	10	ionselect. Electrode/ acc. DIN EN 14538
halogenated compounds	ppm	max	35	35	EP 8.8/0496
sugars			negative	negative	EP 8.8/0496
sulphated ash	%	max	0,01	0,005	EP 8.8/2.4.14
aldehydes	ppm	max	10	10	EP 8.8/0496
heavy metals (as Pb)	ppm	max	5	5	EP 8.8/0496
identification B.C (GC)			meets test	meets test	USP 39 / 621
organic volatile compounds			meets test	meets test	USP 39 / 467
diethylene glycol		%	<0,1	<0,1	USP 39 / 621
ethylene glycol		%	<0,1	<0,1	USP 39 / 621
individual impurities		%	<0,1	<0,1	USP 39 / 621
total impurities		%	<1,0	<1	USP 39 / 621
specific gravity 25 / 25 °C		min	1,249	1,249	USP 39 / 841 II
fatty acids and esters	ml	max	1	1,0	USP 39 / 541
limit of chlorinated compounds	% of Cl	max	0,003	0,003	USP 39
sulfate (USP 38 / 221)	ppm	max	20	5	acc. DIN EN 14538
residue on ignition	mg	max	5	1	USP 39 / 281
odor			mild, typical	mild, typical	organoleptical test
identity (acroleine-test)			meets test	meets test	EC 22.03.12 L83/154
relative density 25 / 25 °C		min	1,257	1,257	EN ISO 12185
refractive index n_D^{20}			1,471 - 1,474	1,471-1,474	EP 8.8/2.2.6
butantriol (GC Impurity A)	%	max.	0,2	<0,1	EP 8.8/2.2.28
acroleine, glucose, ammonium matter			meets test	meets test	EC 22.03.12 L83/154
fatty acids and esters	%	max	0,1	<0,1	calc. as butyric acid
chlorited substances	mg/kg	max	30	<10	ionselect. Electrode/ acc. DIN EN 14538
3-monochloropropan-1,2-diol	mg/kg	max	0,1	<0,1	Inst.Kirch.00.14.34.GC
arsenic	mg/kg	max	3	<3	ISO 17294-2
lead	mg/kg		2	<2	ISO 17294-2
mercury	mg/kg		1	<1	ISO 16772
cadmium	mg/kg		1	<1	ISO 17294-2

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