



# Glycerin, U.S.P. Multi-Compendial

Product No. 2143  
Specifications current as of: Jun 8 2011

TEST	SPECIFICATION
GMP Manufactured Product	
Meets U.S.P. Requirements	
Identification A	Passes Test
Identification B	
Diethylene Glycol	max. 0.10 %
Ethylene Glycol	max. 0.10 %
Identification C	Passes Test
Specific Gravity at 25°/25°C	min. 1.249
Color	Passes Test
Residue on Ignition	max. 0.01 %
Chloride (Cl)	max. 0.001 %
Sulfate (SO <sub>4</sub> )	max. 0.002 %
Heavy Metals (as Pb)	max. 5 ppm
Chlorinated Compounds (as Cl)	max. 0.003 %
Fatty Acids and Esters(as butyric acid)	Passes Test
Assay (as HOCH <sub>2</sub> CHOHCH <sub>2</sub> OH) (calculated on anhydrous basis)	99.0 - 101.0 %
Water (H <sub>2</sub> O)	max. 5.0 %
Related Compounds:	
Individual Impurity	max. 0.1 %
Total Impurities	max. 1.0 %
Meets BP/Ph.Eur. Chemical Specifications	
Identification A	Passes Test
Identification B	Passes Test
Appearance of Solution	Passes Test
Acidity or Alkalinity	Passes Test
Refractive Index, n <sup>20</sup> <sub>D</sub>	1.470 - 1.475
Aldehydes	max. 10 ppm
Ester	Passes Test
Halogenated Compounds	max. 35 ppm

Sugars	Passes Test
Chloride (Cl)	max. 10 ppm
Heavy Metals (as Pb)	max. 5 ppm
Water (H <sub>2</sub> O)	max. 2.0 %
Ash (sulfated)	max. 0.01 %
Impurity A and Related Substances:	
Impurity A	max. 0.1 %
Other Impurities with R <sub>T</sub>	max. 0.1 %
Total impurities R <sub>T</sub> >Glycerol	max. 0.5 %
Assay (anhydrous basis)	98.0 - 101.0 %

Meets JP Chemical Specifications	
Assay (anhydrous basis)	98.0 - 101.0 %
Identification	Passes Test
Specific Gravity at 20°/20°C	min. 1.258
Refractive Index, n <sup>20</sup> <sub>D</sub>	min. 1.470
Color	Passes Test
Residue on Ignition	max. 0.01 %
Chloride (Cl)	max. 0.001 %
Sulfate (SO <sub>4</sub> )	max. 0.002 %
Heavy Metals (as Pb)	max. 5 ppm
Fatty Acids and Esters(as butyric acid)	Passes Test
Readily Carbonizable Substances	Passes Test
Acidity or Alkalinity	Passes Test
Acrolein, Glucose, and Related Compounds	Passes Test
Ammonium (NH <sub>4</sub> )	Passes Test
Calcium (Ca)	Passes Test
Arsenic (As)	max. 2 ppm
Water (H <sub>2</sub> O)	max. 2.0 %

Endotoxin Concentration (EU/g)	max. 5
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No Class 1,2,3 or other solvents are used or produced in the manufacturing or purification of the product.

Bulk Pharmaceutical Chemical

CAUTION: For manufacturing, processing or repacking.

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