

## Certificate of Analysis

GLYCERIN (Glycerin 99.7% USP Grade)

Stock No: NS6130-12-001980, CAS No.: 56-81-5

Test Parameters	Obtained	Limit
<b>Assay</b>	<b>99.70% (by Weight)</b>	<b>99.7 (minimum)</b>
Ash	0.0079 %	NMT 0.01 %
Moisture content	2.62 %	NMT 5.0 %
Chlorides	< 10 ppm	NMT 10 ppm
Glycerol content	98.0 min	-
Water	2.0 Max	-
Spgr	1.26@ 25 c	-
Color	The Color is not darker than the color of standard made by diluting 0.40 ml of ferric chlorides with water to 50 ml	The Color is not darker than the color of standard made by diluting 0.40 ml of ferric chlorides with water to 50 ml
Specific gravity	1.265 g/ml	NLT 1.249 g/ml
Sulphate	< 10 ppm	NMT 20 ppm
Heavy metals	< 5 ppm	NMT 5 ppm
Chlorinated comp.	< 10 ppm	NMT 30 ppm
Fatty acid & ester	0.6 ml of 0.5N NaOH is used	NMT 1 ml of 0.5 N NaOH is consumed
pH	5.06	-
<b>Limit of ethylene glycol and diethylene (by GC)</b>		
Ethylene glycol	Not Detected	NMT 0.1 %
Diethylene glycol	Not Detected	NMT 0.1 %
<b>Organic impurities (by GC)</b>		
Individual impurity	0.07 %	NMT 0.1 %
Total impurities	0.08 %	NMT 1.0 %

Manufacturer : Nanoshel (IMPL)

Note: Sample COA only