



CERTIFICATE OF ANALYSIS

QUANTITY/COMMODITY : 80 MT (320 DRUMS)
GLYCERINE - USP/KOSHER 99.7% MIN

PACKING : IN 250KG NEW LINED STEEL DRUMS PALLETIZED

CONTAINER / BATCH NO : TRHU 2059223 (G131221-5); MSCU 6448220 (G131222-1); MSCU 3436165 (G131224-2);
MEDU 1051730 (G131224-3).

PRODUCTION DATE : DECEMBER 21,22,24, 2013

EXPIRY DATE : DECEMBER 21,22,24, 2014

VESSEL : KARIN V.HB352R/MSC RANIA V.FG352A

BUYER PO NUMBER PD111913

A COMPOSITE SAMPLE WAS DRAWN FROM THE ABOVE-MENTIONED CONSIGNMENT FOR ANALYSIS. ON ANALYSIS THE FOLLOWING RESULTS WERE OBTAINED :

<u>Parameter</u>	<u>Unit</u>	<u>Result</u>	<u>Specification</u>	<u>Test Method</u>
Appearance		Transparent	Transparent	Visual
Identification A (IR)		Conform	Conform	USP 36 : 2013 (197F)
Identification B				
- Diethylene Glycol	%	<0.10	0.10 max	USP 36: 2013
- Ethylene Glycol	%	<0.10	0.10 max	USP 36: 2013
Glycerine Content	%	99.8	99.7 min	USP 36 : 2013
Inorganic Impurities :				
- Chloride	ppm	<10	10 max	USP 36: 2013 (221)
- Sulfate	ppm	<20	20 max	USP 36: 2013 (221)
- Heavy Metal as Pb	ppm	<5	5 max	USP 36: 2013 (231)
- Residue on Ignition	%	0.007	0.01 max	USP 36: 2013 (281)
Organic Impurities :				
- Related Compounds				
- Individual Impurities	%	NIL	0.10 max	USP 36: 2013
- Total Impurities	%	NIL	1.0 max	USP 36: 2013
- Chlorinated Compounds	ppm	<30	30 max	USP 36: 2013
Fatty Acids & Esters (as mL of 0.5N NaOH/50 g)		0.23	1 max	USP 36: 2013
Color	mL FeCl3	<0.4	0.4 max	USP 36: 2013
Specific Gravity @ 25		1.2614	1.2607 min	USP 36: 2013 (841)
Moisture Content	%	0.10	0.3 max	USP 36: 2013 (921)