

DATE : 14 JANUARY 2021

CERTIFICATE OF ANALYSIS

REF NO : G/QC/GSK/21/I-029
 QUANTITY/COMMODITY : 100.000 MT (400 DRUMS)
 WILFARIN REFINED GLYCERINE 99.7%
 PACKING : IN 250KG NEW LINED STEEL DRUMS LOOSE STUFFED
 MANUFACTURING DATE : DECEMBER 29, 2020; DECEMBER 30, 2020; JANUARY 04, 2021
 BEST BEFORE : DECEMBER 29, 2022; DECEMBER 30, 2022; JANUARY 04, 2023
 VESSEL : NORTHERN VALENCE V.2009N
 PI NO : 100220RK3525
 CONTAINER / BATCH NO : BEAU 2408679 (G201229-2W); HALU 2085950 (G201230-1W);
 SKLU 1441337 (G201230-3W); BEAU 2515255 (G210104-1W);
 HALU 2069347 (G210104-2W)

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 42: 2019 (197F)
Identification B				
- Diethylene Glycol	%	<0.10	0.10 max	USP 42: 2019
- Ethylene Glycol	%	<0.10	0.10 max	
Identification C				
(Confirmation of Glycerin by GC)		Conform	Conform	USP 42: 2019
Glycerine Content	%	99.8	99.7 min	USP 42 : 2019
Inorganic Impurities :				
- Chloride Content	ppm	<10	10 max	USP 42: 2019 (221)
- Sulfate Content	ppm	<20	20 max	USP 42: 2019 (221)
- Residue on Ignition	%	0.005	0.01 max	USP 42: 2019 (281)
Organic Impurities :				
- Related Compounds				
- Individual Impurities	%	<0.1	0.10 max	USP 42: 2019
- Total Impurities	%	<1.0	1.0 max	USP 42: 2019
- Chlorinated Compounds	ppm	<30	30 max	USP 42: 2019
Fatty Acids & Esters				
(as mL of 0.5N NaOH/50 g)		0.24	1 max	USP 42: 2019
Color (mL FeCl3)	-	<0.4	0.4 max	USP 42: 2019
Specific Gravity @ 25		1.2614	1.2612 min	USP 42: 2019 (841)
Moisture Content	%	0.10	0.3 max	USP 42: 2019 (921)
Color	APHA	5	10 max	AOCS Ea 9-65
Heavy Metal as Pb	ppm	< 5	5 max	USP 42: 2019

for and on behalf of
PT. WILMAR NABATI INDONESIA



(AS MANUFACTURER)