

PRODUCT CODE: TOL004-4.0R  
 BATCH NO: L10040221TOL004  
 REF NO.: 0320 KA-PS  
 SAMPLE DATE: 04.02.2021  
 EXPIRED DATE: 03.02.2024

## CERTIFICATE OF ANALYSIS

ANALYSIS	UNIT	METHOD	SPECIFICATION		RESULT
			Min	Max	
Appearance	-	Visual	Clear and free from suspended matter		Pass
Purity	wt %	ASTM D2360	98.5	-	99.82
Non-Aromatic	% wt	ASTM D2360	-	1.5	0.170
Specific Gravity @ 30°C	-	ASTM D4052	report		0.8611
Specific Gravity @ 15.56/15.56°C	-	ASTM D4052	0.8690	0.8730	0.8721
Distillation Range	°C	ASTM D850	Max total distillation range 1°C @ 760mmHg including temperature of 110.6 °C		0.8
Distillation, IBP					110.0
Distillation, DP					110.8
Acid wash colour	-	ASTM D848	-	2	< 1
Copper corrosion	-	ASTM D849	Pass (1a or 1b)		1a
Acidity (mg NaOH / 100 mL)	-	ASTM 847	No Free Acid		Pass
Sulphur Compound	-	ASTM D853	Free of H <sub>2</sub> S & SO <sub>2</sub>		Pass
Colour, Pt-Co	APHA	ASTM D1209	-	20	< 5
Water Content by Karl Fischer	% wt	ASTM E1064	-	0.10	0.009

Note:

- 1) All data above is received from supplier and is not to be constructed as a presentation of which assumed legal responsibility