

Supporting Information

Study on the Alternative Solvent of Methylbenzene in Total Acid Number Titration of Current Jet Fuel

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Supplementary Tables

Table S1. Titration results with the mixed solution of methylbenzene, isopropanol and water ($V_{\text{methylbenzene}}:V_{\text{isopropanol}}:V_{\text{water}} = 100:99:1$) as titration solvent.

Parameter	Jet fuel sample					Blank sample		
	1	2	3	4	5	1	2	3
Quality of jet fuel/g	100.0	100.0	100.0	100.0	100.0	-	-	-
Volume of titration solvent /mL	100	100	100	100	100	100	100	100
Flow rate of N ₂ /mL min ⁻¹	700	700	700	700	700	700	700	700
Volume of indicator/mL	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Volume of consumed KOH solution /mL	0.60	0.64	0.65	0.62	0.63	0.24	0.22	0.23
TAN/ $\mu\text{g KOH g}^{-1}$	2.5	2.7	2.8	2.6	2.8	-	-	-

Table S2. Titration results with the mixed solution of absolute ethanol and water ($V_{\text{absolute ethanol}}:V_{\text{water}} = 99:1$) as titration solvent.

Parameter	Jet fuel sample					Blank sample		
	1	2	3	4	5	1	2	3
Quality of jet fuel/g	100	100	100	100	100	-	-	-
Volume of titration solvent /mL	100	100	100	100	100	100	100	100
Flow rate of N ₂ /mL min ⁻¹	700	700	700	700	700	700	700	700
Volume of indicator/mL	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Volume of consumed KOH solution /mL	0.53	0.52	0.52	0.54	0.54	0.14	0.14	0.14
TAN/ $\mu\text{g KOH g}^{-1}$	2.6	2.5	2.5	2.7	2.7	-	-	-