

SulNOx Group Plc
 10 Orange Street
 Haymarket, London
 WC2H 7DQ

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CERTIFICATE OF QUALITY No. L 53498-1


Vessel/Operation : Sample and Analysis	Job Number : IM 44730
Product/Grade : Gasoline	Sample Number: 85863
Location : Immingham	Date of Sampling : 22/02/2021
Sample Origin : Service Station Pump Fuel with the addition of SulNOxEco™ Petrol Conditioner	Date Received : 22/02/2021
	Date Tested : 22-24/02/2021

Test	Method	Unit	Result
Density @ 15 Deg C	IP 365	kg/ltr	0.7261
Dry Vapour Pressure Equivalent (DVPE)	EN 13016-1	kPa	96.7
Appearance	* D4176 Procedure 1	-	Clear & Bright
Free Water	* D4176 Procedure 1	-	None Visible
Suspended Matter	* D4176 Procedure 1	-	None Visible
RON	* IP 237	ON	95.0
MON	* IP 236	ON	87.0
Antiknock Index	* ASTM D4814	-	91.0
Colour	Visual	-	Undyed
Copper Strip Corrosion (3hrs @ 50 Deg C)	IP154	-	1a
Silver Corrosion (3hrs @ 50 Deg C)	* IP154	-	0
Doctor Test	IP30	-	Negative
Driveability Index	* ASTM D4814	-	474.7
Existent Gum (Unwashed)	* IP131	mg/100ml	<1
Existent Gum (Solvent Washed)	* IP131	mg/100ml	<1
Oxidation Stability	* ISO 7536	Mins	>360
Lead	* IP428	mg/kg	<2.5
Manganese	* EN16136	mg/kg	<0.1
Hydrogen Sulphide	* IP 342	mg/kg	<1
Mercaptans	* IP 342	mg/kg	5

Latest issue of test methods used unless stated otherwise.
 The above results relate only to the item tested.
 Please refer to ASTM D3244-07 and to IP method 367 Appendix E for utilisation of test data for conformance with specifications
 No Measurement Uncertainty (MOU) has been applied to the reported results. The MOU is available via the reference standard or via request directly from the Laboratory.
 Where sampling performed by Bureau Veritas, it is outside the scope of UKAS accreditation
 * denotes test is outside laboratories scope of UKAS accreditation
 Product meets EN 228 specification (both E5 and E10) based on tests performed and results obtained only with no MOU applied
 Product meets most US specifications based on tests performed and results obtained only with no MOU applied

Chemist

Richard Blyth
Ian Savage


 M. Hollingsworth UK Laboratory Manager
 Authorised Signatory for Bureau Veritas



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CERTIFICATE OF QUALITY No. L 53498-2

Vessel/Operation :	Sample and Analysis	Job Number :	IM 44730
Product/Grade :	Gasoline	Sample Number:	85863
Location :	Immingham	Date of Sampling :	22/02/2021
Sample Origin :	Service Station Pump Fuel with the addition of SulNOxEco™ Petrol Conditioner	Date Received :	22/02/2021
		Date Tested :	22-24/02/2021

Test	Method	Unit	Result
Total Oxygenates	EN 22854	%Vol	4.62
MTBE	EN 22854	%Vol	<0.01
DIPE	EN 22854	%Vol	<0.01
ETBE	EN 22854	%Vol	<0.01
TAME	EN 22854	%Vol	<0.01
Methanol	EN 22854	%Vol	<0.01
Ethanol	EN 22854	%Vol	4.62
n-propanol	EN 22854	%Vol	<0.01
i-propanol	EN 22854	%Vol	<0.01
n-butanol	EN 22854	%Vol	<0.01
i-butanol	EN 22854	%Vol	<0.01
s-butanol	EN 22854	%Vol	<0.01
t-butanol	EN 22854	%Vol	<0.01
2-methyl-2-butanol	EN 22854	%Vol	<0.01
Oxygen Content	EN 22854	%Mass	1.76
Aromatics	EN 22854	%Vol	26.76
Olefins	EN 22854	%Vol	4.99
Naphthalenes	EN 22854	%Vol	2.51
Benzene	EN 22854	%Vol	0.46

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CERTIFICATE OF QUALITY No. L 53498-3

Vessel/Operation : Sample and Analysis	Job Number : IM 44730
Product/Grade : Gasoline	Sample Number: 85863
Location : Immingham	Date of Sampling : 22/02/2021
Sample Origin : Service Station Pump Fuel with the addition of SulNOxEco™ Petrol Conditioner	Date Received : 22/02/2021 Date Tested : 22-24/02/2021

Test	Method	Unit	Result
Distillation @ 760 mmHg - IBP	IP 123, ISO 3405	Deg C	24.7
10% Evaporated	IP 123, ISO 3405	Deg C	38.6
20% Evaporated	IP 123, ISO 3405	Deg C	46.6
30% Evaporated	IP 123, ISO 3405	Deg C	54.0
40% Evaporated	IP 123, ISO 3405	Deg C	63.0
50% Evaporated	IP 123, ISO 3405	Deg C	87.2
60% Evaporated	IP 123, ISO 3405	Deg C	106.6
70% Evaporated	IP 123, ISO 3405	Deg C	119.2
80% Evaporated	IP 123, ISO 3405	Deg C	133.1
90% Evaporated	IP 123, ISO 3405	Deg C	155.2
Final Boiling Point	IP 123, ISO 3405	Deg C	201.6
Evaporated at 70 Deg C	IP 123, ISO 3405	%Vol	43.5
Evaporated at 100 Deg C	IP 123, ISO 3405	%Vol	55.9
Evaporated at 150 Deg C	IP 123, ISO 3405	%Vol	88.0
Residue	IP 123, ISO 3405	%Vol	1.1
Phosphorous	* ASTM D3231	g P/ US Gal	<0.0001
Sulphur content (UV)	IP 490	mg/kg	5.1
Vapour Lock Index (VLI)	* Calculation	-	1271.5

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