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Akkreditiert nach DIN EN ISO/IEC 17025

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Final Report: SP11-01361 / Client Order No.: SGS TÜV Saarland 1908799

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SGS Sample No.:

SP11-01361.002

SGS SAP Order No.:

1908724

Product designated:

Gasolie-Additive-Mixture

Specification:

Date received:

24.03.2011

Sample amount:

10 I

Packaging: Client reference:

Sample Label:

10 I Metal cab

Fuel-Additive-Mixture

Shell V-Power10 I

+ SSL Petrol Energizer 3 ml

Test / Analyte	Test Method / Norm	Spezification		Result	Unit
Appearance*	visual	Min.	Max.		
Water	Violati			free from	
· · · · · · · · · · · · · · · · · · ·				undissolved water	-
Contamination				free from solid	_
				matter	
Appearance				clear and bright	-
Density @ 15°C	DIN EN ISO 12 185	720.0	775.0	742.0	kg/m³
Vapour Pressure	DIN EN 13 016-1				
DVPE		60.0	90.0	63.9	kPa
Distillation	DIN EN ISO 3405				
evaporated @ 50°C		***		9.3	% v/v
evaporated @ 70°C		22.0	50.0	29.7	% v/v
evaporated @ 100°C		46.0	71.0	56.4	% v/v
evaporated @ 150°C		75.0		88.9	% v/v
Final Boiling Point			210	190.8	°C
Residue			2	0.9	% v/v
Vapour Lock Index	calc. EN 228			847	<u>-</u>
Oxidation stability	DIN EN ISO 7536	360		>360	min
Ex-Gum	DIN EN ISO 6246				
washed			5	<1	mg/100 ml
Copper corrosion 3h @ 50°C	DIN EN ISO 2160		1	1a	Grade
Research Octane Number	DIN EN ISO 5164		•	14	Orage
corrected, EN 228	5.11 E11 100 0 10 1	95.0		98.7	-

^{* =} Test method not accredited

The results shown in this test report specifically refer to the sample(s) tested as received unless otherwise stated. All tests have been performed using the latest revision of the methods indicated, unless specifically marked otherwise on the report. Precision parameters apply in the determination of the above results. Precision data are calculated on request. Users of the data shown on this report should refer to the latest published revisions of ASTM D-3244; IP 367; ISO 4259 and Appendix E of IP Standard Methods for Analysis and Testing when utilising the test data to determine conformance with any specification or process requirement. If transmitted electronically, this report does not require a signature. This report shall not be reproduced except in full, without the written approval of the SGS laboratory. This Test Report is issued under the Company's General Conditions of Service (copy available upon request). Attention is drawn to the limitations of liability, indemnification and



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SP11-01361.002

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Product designated:

Gasolie-Additive-Mixture

Specification:

Sample amount:

10 I

Date received:

24.03.2011

Packaging: Client reference: 10 I Metal cab

Sample Label:

Fuel-Additive-Mixture Shell V-Power10 I

+ SSL Petrol Energizer 3 ml

Test / Analyte	Test Method / Norm	Spezification		Result	l lmi4
		Min.	Max.	Result	Unit
Research Octane Number	DIN EN ISO 5164				
uncorrected				98.9	-
Motor Octane Number	DIN EN ISO 5163				
corrected, EN 228		85.0		88.7	-
uncorrected				88.9	-
Lead	DIN EN 237		5.0	<0.1	mg/l
Sulfur content	DIN EN ISO 20846		10.0	7.4	mg/kg
O-PONA	DIN EN ISO 22854				
Aromatics			35.0	28.9	% v/v
Olefines			18.0	10.4	% v/v
Benzene			1.00	0.92	% v/v
Total Ethers			15.0	11.04	% v/v
Methanol			3.0	< 0.01	% v/v
Ethanol			5.0	0.3	% v/v
Iso-Propanol			10.0	0.05	% v/v
Iso-Butanol			10.0	< 0.01	% v/v
tert. Butanol			7.0	0.01	% v/v
Total Other Oxygenates			10.0	0.07	% v/v
Oxygen			2.7	1.85	% m/m

The results of analysed parameters are within limits of specifications

DIN EN 228:2008. Speyer, 31.03.2011

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i.V. Simone Schmidt Lab Manager

i.A. Stefan Heppes Deputy Lab Manager

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