

Certificate of Quality No. LV.30.19.0006.L.5

Cargo grade	DIESEL PRO-32, WINTER GRADE (EN 590)
Sample description / No.	1 x 5000 ml metal can/ No. 703
Sample labelled	UML Sample ex Shore Tank No. N4 (Gross weight (vac) – 3797.932mt) at Neste Terminal, Riga
Sample taken	on 25 th of January, 2019
Sample received by laboratory	on 25 th of January, 2019
Sealed	Unsealed
Date of testing	on 25 th – 26 th of January, 2019
Client	SIA NESTE LATVIJA

TESTS, UNITS	METHODS	SPECIFICATION	RESULTS
Ash Content, % m/m	EN ISO 6245	0.001 max.	Less than 0.001
Carbon Residue (on 10% distillation residue), % m/m	EN ISO 10370	0.20 max.	Less than 0.10
Cetane Index,	EN ISO 4264	52.0 min.	More than 56.5
Cetane Number*,	EN ISO 5165	55.0 min.	55.5
Cloud Point, °C	EN 23015	-32 max.	-32
Cold Filter Plugging Point, °C	EN 116	-37 max.	-41
Copper Strip Corrosion 3h @ 50°C,	EN ISO 2160	class 1	1a
Density @ 15.0° C, kg/m ³	EN ISO 12185	800.0 – 840.0	807.3
Distillation @ 760 mm Pressure,	EN ISO 3405		
Recovered @ 250°C, % v/v		65.0 max.	61.6
Recovered @ 350°C, % v/v		85.0 min.	More than 98.6
95% v/v recovered at, °C		340.0 max.	296.3
Final Boiling Point (recovered 98.6% v/v), °C			315.6
Fatty Acid Methyl Esters, % v/v	EN 14078/A	FAME free	Less than 0.05
Flash Point PMCC, °C	EN ISO 2719/A	57.0 min.	65.5
Lubricity at 60°C (WS 1.4), µm	EN ISO 12156–1/B	400 max.	220
Manganese Content, mg/l	EN 16576	2.0 max	Less than 0.5
Oxidation Stability			
total insoluble, g/m ³	EN ISO 12205	25 max	1
Polycyclic Aromatic Hydrocarbons, % m/m	EN 12916	2.0 max.	0.3
Sulphur Content, mg/kg	EN ISO 20846	10.0 max.	1.2
Total Contamination, mg/kg	EN 12662	24 max.	Less than 12.0
Viscosity Kinematics @ 40°C, mm ² /s	EN ISO 3104	2.000– 4.500	2.004
Water Content by Coulometric KF, mg/kg	EN ISO 12937	200 max.	17
Content of Neste Renewable Diesel, % v/v	Average Calc.	15 min.	15.74**

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. Users of the data shown on this report should refer to the latest published revisions of ASTM D3244; IP 367 and ISO 4259 and when utilising the test data to determine conformance with any specification or process requirement. This Test Report is issued under the Company's General Conditions of Service (copy available upon request or on the company website at www.sgs.com). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. This report shall not be reproduced except in full, without the written approval of the laboratory.

*The laboratory analysis for the Sub-Contract Laboratory tests are provided by: S2 – Sub-Contract Laboratory

**Result based on data taken from Refinery Certificate No.: LT-19-000224 and SGS Certificate of Analyses No.: LV.30.18.1098. L.10



Larisa Bondarchuk
Deputy Laboratory



For and on behalf of
SGS Latvija Ltd.
Ventspils, 26th of January, 2018
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