

CENTRAL LABORATORY FOR CHEMICAL ANALYSIS

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#### TESTING THE PROPERTIES OF FUEL AND RESIDUAL OIL

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| ***No.*** | ***TYPE OF TEST / PROPERTY*** | ***Units*** | ***TEST METHOD*** |
| **1.** | **Density - Hydrometer method \*** | kg/m3 | HRN EN ISO 3675 |
| **2.** | **Density – Oscillating U-tube method** | kg/m3 | HRN EN ISO 12185 |
| **3.** | **Flash point - Pensky-Martens closed cup method \*** | oC | HRN EN ISO 2719 |
| **4.** | **Carbon residue** | mass.% | HRN EN ISO 10370 |
| **5.** | **Determination of ash** | mass.% | HRN EN ISO 6245 |
| **6.** | **Kinematic viscosity**  | mm2/s | HRN EN ISO 3104 |
| **7.** | **Kinematic viscosity of transparent and opaque liquids** | mm2/s | ASTM D 445 |
| **8.** | **Pour point** | oC | HRN EN ISO 3016 |
| **9.** | **Determination of water and sediment Centrifuge method** | vol.% | HRN EN ISO 3734 |
| **10.** | **Determination of water – Distillation method** | vol.% | HRN EN ISO 3733 |
| **11.** | **Carbon (C), hydrogen (H) and nitrogen (N) content \*** | mass.% | ASTM D5291 |
| **12.** | **Sulfur content (S) – EDXRF \*** | mass.% | HRN EN ISO 8754 |
| **13.** | **Nickel (Ni) and vanadium (V) content** | mg/kg | UOP 842 |
| **14.** | **Calorific value \*** | MJ/kg | ASTM D240 |
| **15.** | **Emission factor \*** | tCO2/TJ | EU Directive No 2018/2066 |

 NOTE: **\*** accredited methods according to HRN EN ISO / IEC 17025