Federal State Unitary Enterprise

Central Research and Development Automobile and Automotive Engine Institute
- FGUP NAMI -

"APPROVED" Technical Director of FGUP NAMI (signed) A.L. Zeitlin

TECHNICAL REPORT No.

Subject Studies of impact of fuel (gasoline) with INOIL-B catalyst on engine reliability and determination of detergent properties.

Contract No. 2610.D.K.NIR.0914.941 of <u>04 September</u> 2014 with Scientific and Production Group INOIL LLC

CONCLUSION

The INOIL-B catalyst-additive developed by the Scientific and Production Group INOIL LLC showed its high efficiency in improving the technical, economic and environmental properties of the engine with spark ignition of VAZ-21134 vehicle when it was added to commercial gasoline AI-92. The increase of maximum power Ne_{max} of the engine reaches 11.5%, of maximum torque $M\kappa p_{max} - 5.4\%$.

During vehicle testing in the conventional urban cycle in Moscow with a total run of 30,000 km reduction of operational fuel consumption by 10 - 15 % was observed.

The use of additive is especially effective when the vehicle in operated in conditions of intensive urban traffic during peak hours.

The use of gasoline with INOIL-B catalyst ensures the reduction of emissions of all three harmful substances (CO, CH, NOx) by 20 -40%.

The INOIL-B catalyst-additive ensures efficient operation of the modern integrated system of conversion during long-term operation of the vehicle, which guarantees compliance with EURO-5 and EURO-6 standards and environmental requirements of the Technical Regulation of the Customs Union TR TS 018/2011 "On Safety of Wheeled Vehicles".

The process of long-term endurance testing demonstrated an effective positive influence of the additive on reliability and endurance of the vehicle engine.