

QUALITIUM

MOTOR OIL

SHORT QUESTIONS AND ANSWERS ABOUT QUALITIUM NANO



Specifications

SAE: 5W/30
API: SP/SN/SN+/CF
ACEA: C3/C2
+ graphene nanoparticles

Why was this motor oil created?

This oil is the result of research and development works carried out as part of the implementation of an EU project. The main idea was to create a unique oil with the use of modern material nanotechnologies.

Why in the name "NANO"?

Qualitium NANO oil contains graphene nanoparticles - the name is an abbreviation of the scale of the material used.

What exactly is this graphene?

Graphene is a nanomaterial made of carbon atoms. Its structure resembles a honeycomb - which is somehow depicted on the label.

Why just graphene?

Graphene is a two-dimensional material with unique anti-wear and anti-seizing properties not found in conventional additives.

What is the effect of graphene on the quality of the oil?

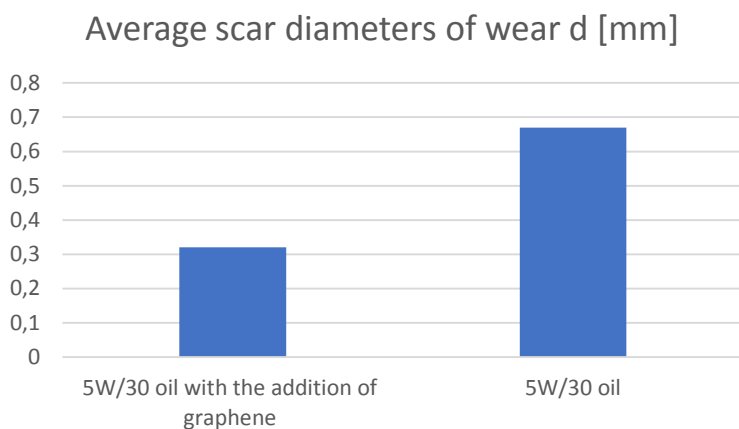
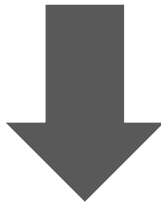
Even a small amount of it contributes to the reduction of wear of engine components - how? Explanation below.

QUALITIUM NANO 5W/30

Very good anti-wear and anti-seizing properties

The extreme mechanical strength of graphene results in the formation of an almost indestructible coating on the lubricated elements.

REDUCTION OF THE WEAR SCAR DIAMETER BY 50%!



The weld load (P_z) and load wear index (I_h) increased by over 20%, which characterize the antiseizing effect of QUALITIUM NANO oil!

* The above figures were obtained as a result of tribological tests at Łukasiewicz Research Network – The Institute for Sustainable Technologies in Radom - the reference sample was the same 5W/30 engine oil without the addition of graphene.

During the project implementation, operational tests were carried out - confirming the high quality of QUALITIUM NANO oil!

Motor oil with graphene can be used in engines with DPF particulate filters!

Comparison	Size
Graphene	500 nm (0,5 μm)
Pores in DPF filters	10 – 20 μm

Graphene is 20 - 40 times smaller than the pores size of DPF filters!