

Category

Energy and Environment

Solution

The automotive engine oil results into low friction, low wear regime, and improved thermal properties. Graphene can replace thin solid films usually used for reducing adhesion and friction of various surfaces which is attributed by its atomically smooth two-dimensional material with low surface energy.

Technology & Applications

The graphene enhanced engine oil for automotive application comprises of reduced graphene oxide additive blended with base oil 10W40. Formulation can be adapted for other grades of base oil.

Advantages

- The graphene-enhanced engine oil exhibits the most suitable properties, especially lower evaporation loss
- The lower amount of wear metal of lead (Pb) and almost all of contaminants & additives in graphene lubricants indicated that it has better wear resistance compared to base lubricant (without graphene)

Intellectual Property

Patent: PI2020004119

Inventor

Dr. Lee Tai Kyu
(*Nanopac Korea*)

Technology Partner

Nanopac (M) Sdn Bhd

Gallery

Graphene
Additive



Graphene
Engine Oil



Contact Us!

bdo@nanomalaysia.com.my