

What is graphene? And why it should be applied in the textile world?

Those are the questions that we often receive.

Graphene is a one-atom-thick layer of carbon of atoms arranged in a hexagonal lattice.

It is the building block of graphite (which is used, among other things, in pencil tips for example), but graphene is a remarkable substance on its own with a multitude of astonishing properties which repeatedly earn it the title “wonder material”.

Thanks to its unique properties graphene is applied in different industrial sectors such as: medical, aerospace, industrial and textile.

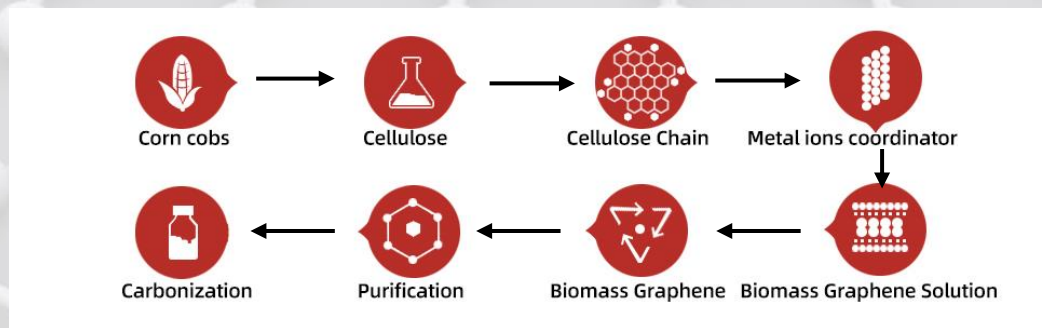
Graphene properties

- Thermoregulation: Graphene can keep the basal body temperature stable, with no strong thermal fluctuations detected in the event of changes to the surrounding temperature or physical exertion.
- Antibacterial: Graphene nanoparticles are free from acute and chronic toxicity and have excellent anti-bacterial properties.



Application of Graphene on different types of fibres (such as polyester, cotton, wool, silk, cashmere, etc.) or membrane give the possibility to increase their physical characteristics. But innovation is not the only driver of this project, and sustainability could not be neglected.

In fact, in a world where environmental issue becomes day after day more important, even our project should be 100% sustainable, that is why we decided to apply only biomass graphene to our products. Biomass graphene is obtained from a fully mechanic industrial process that begins with corn cobs waste: :



Thanks to this unique procedure, biomass graphene is 100% natural and differs from the common graphene obtained from non-renewable resources like graphite.

In summary, the combination of those two drivers: innovation and sustainability made Graphene a cutting hedge project for textile sector, and since its applications are potentially illimited, we believe that it will change forever the way we think about fashion and sportswear.