OCSiAl is the world’s largest manufacturer of graphene nanotubes, owning the only scalable technology capable of synthesizing them in industrial volumes.

A graphene nanotube, also known as a single wall carbon nanotube, is a rolled-up sheet of graphene possessing exceptional properties, such as high electrical and thermal conductivity, strength, and flexibility. These unique characteristics make graphene nanotubes a versatile additive with potential applications across up to 50% of global materials markets. When integrated into materials, they form a 3D reinforcing conductive network, providing a new set of properties to the final product. Advanced high-performance batteries, composites, plastics, coatings, and other materials additionally enable companies to contribute to reductions in CO2 emissions at all stages of manufacturing and during usage of new products, stimulating global efforts to achieve carbon neutrality.

OCSiAl produces high-purity graphene nanotubes under the brand name TUBALL™ and accelerates the transformation process of nanotubes from the laboratory to being an industrial-scale material by simplifying their handling. The company has developed TUBALL™-formulated technologies for various applications.

TUBALL™ BATT, an ultrafine dispersion of graphene nanotubes in liquid carriers, is a ready-to-use solution designed for high-energy anodes and cathodes. OCSiAl nanotubes create long, robust electrical networks between active material particles, improving key battery characteristics, including cycle life, DCR (reduced resistance), C-rate performance, and cohesion between active battery material particles, making the battery electrodes more durable. Graphene nanotubes unlock new battery technologies, including high-silicon-content anodes, thick LFP cathodes, fast-charging graphite anodes, and more. They can be applied in both conventional and emerging battery tech, such as a dry battery electrode coating process, and in solid-state batteries.

The TUBALL™ MATRIX nanotube concentrate product line is specifically designed for various elastomers, thermosets, and thermoplastics. It is widely used as a conductive filler to impart anti-static and ESD properties. Depending on the specific requirements, the working dosage is in the range of 0.1–1 wt.% in the final compound. TUBALL™ MATRIX is also increasingly being used as a reinforcing additive in various types of materials, enabling the production of lightweight, strong, smart, conductive, and colored products.

The company’s technical support centers are located in Luxembourg, China, and Serbia. They are designed to be capable of completing the full development chain: from initial research to the fine-tuning of the application of TUBALL™ in pilot industrial lines.

TUBALL™ graphene nanotubes are authorized for use across a wide range of industries. They comply with EU-REACH and US Environmental Protection Agency regulations, allowing the commercialization of up to 100 tonnes of single wall carbon nanotubes annually in Europe and an unlimited tonnage band in the US.

Headquartered in Luxembourg, OCSiAl is represented throughout Europe, the US, South Korea, China, Hong Kong, Canada, Mexico, Malaysia, Taiwan, Japan, and India. OCSiAl collaborates with more than 1,500 companies in over 50 countries worldwide and enjoys a network of 25 distributors.

[tuball.com](http://tuball.com/)

[ocsial.com](http://www.ocsial.com)