

# Graphene -X Composite Grade

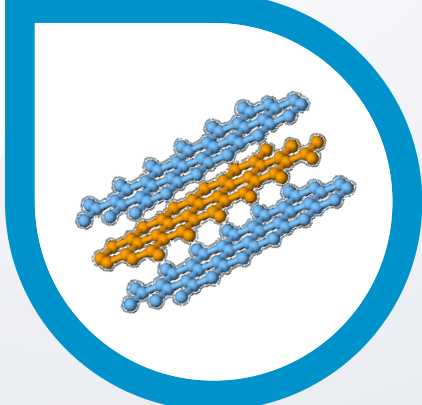


Used as a reinforcing filler in composite materials due to its exceptional mechanical, electrical, thermal and barrier properties. It enhances the performance of composite at very low cost on matrix.



THICK: ~5-10 nm

ADG-X



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# PRODUCT FEATURES

# ADG-X

Purity: >99%

## Advantages

- ▶ When incorporated into a composite material, graphene sheets or nanoplatelets can significantly increase its tensile strength, toughness, and stiffness, leading to enhanced structural performance.
- ▶ Its high electrical conductivity allows it to act as a conductive filler in composites, improving their electrical properties.
- ▶ It can facilitate the efficient transfer of heat, resulting in enhanced thermal conductivity and heat dissipation capabilities.
- ▶ When incorporated into composites, it can enhance their barrier properties, preventing the diffusion or permeation of substances.
- ▶ It can be integrated into composites using various manufacturing techniques, such as solution mixing, roll mixing and melt blending

## Applications

Thermoplastics

Thermosets

Elastomers

Used to improve  
the properties of  
Automobile components

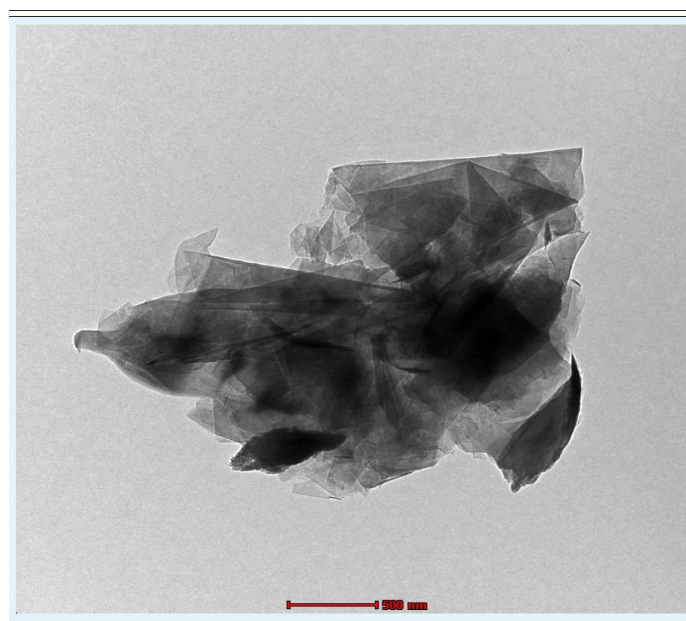
Electronics and Electrical  
Applications

As an additive for  
Composites

# TECHNICAL DATA SHEET

## SPECIFICATION

ADG-X	DESCRIPTION
PURITY	>99%
PARTICLE SIZE	D50: <20 $\mu$
THICKNESS	5-10 nm
BULK DENSITY	~0.11 g/cm <sup>3</sup>
PHYSICAL FORM	POWDER
COLOUR	BLACK
SURFACE AREA	~ 120 m <sup>2</sup> /g
CAS NO.	1034343-98-0



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