heXo-G
Performance Through Carbon Chemistry

heXo-G V Product Datasheet

heXo-G V4, Few Layer Graphene (FLG):

The **heXo-G V4** is a high performance versatile few layer graphene with average thickness of 4 to 6 nm (8-12 layers) and flake size of 3 μm. **heXo-G V4** offers excellent dispersion and provides high thermal conductivity and barrier properties to materials. It's high dispersibility and surface area help attain significant performance improvements with minimal loadings of graphene. heXo-G V4 is particularly suited for thermosets and coatings, sensors, supercapacitors and fuel cells.

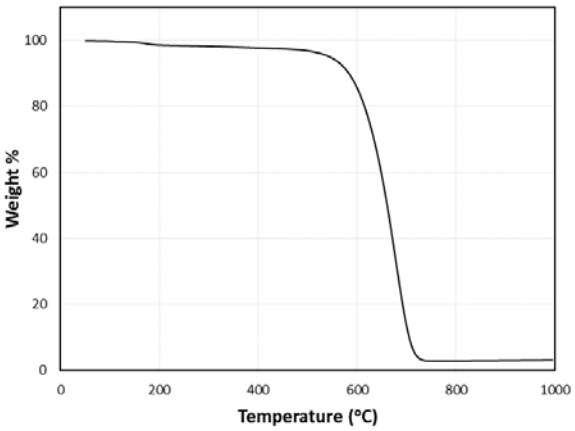
heXo-G V20, Graphene NanoPlatelet (GNP):

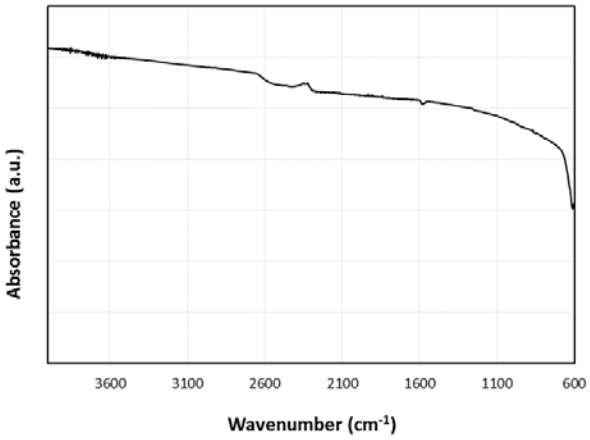
The **heXo-G V20** is a versatile and low-cost graphene nanoplatelet with average thickness of 20 nm (40 layers) and flake size of 50 μm. **heXo-G V20** provides high electrical conductivity while enhancing the thermal, mechanical and barrier properties of materials. It is particularly well suited for thermoplastics manufactured involving a high shear, twin screw extrusion process which can separate and further disperse the particles to achieve significant improvements with small additions of graphene. **heXo-G V20** is also an ideal nanomaterial which can enhance the conductivity of next generation graphite-, silicon- and sulfur-based battery electrodes.

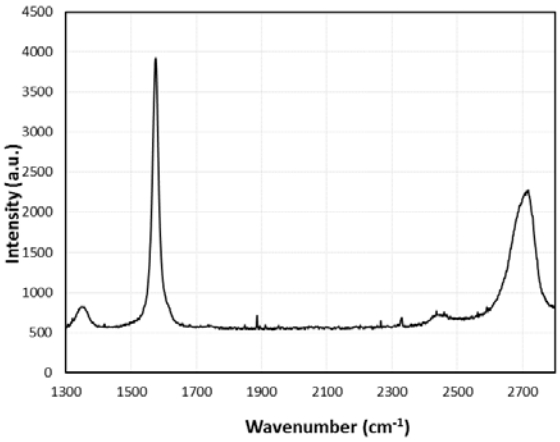
	heXo-G V4	**heXo-G V20**	
Properties			
Average thickness	4-6	20	nm
Average flake size	3	50	μm
Bulk density	0.13	0.24	g/cm^3
Surface area (BET method)	100-150	30	m^2/g
Content			
Appearance	Light Powder	Powder	
Carbon content	> 93	> 92	wt.%
Oxygen content	< 4	< 5	wt.%
Ash content	2.7	2.5	wt.%
Moisture	< 0.5	< 0.6	wt.%
Applications & Benefits			
Electrical conductivity	**	***	
Thermal conductivity	***	***	
Liquid dispersion	***	*	
Mechanical strengthening	**	**	
Moisture and oxygen barrier	***	**	
Typical applications	Thermosets, thermoplastics and coatings, antistatic and EMI shielding, sensors, thermal interface materials, UV resistance, supercapacitors	Thermoplastics, conductive/ESD composites, thermal conductivity, material strengthening, battery electrodes	

This data sheet is intended for general information only. The provided information is the most accurate available at the time of preparation.

HeXo-G V4, Few Layer Graphene (FLG)







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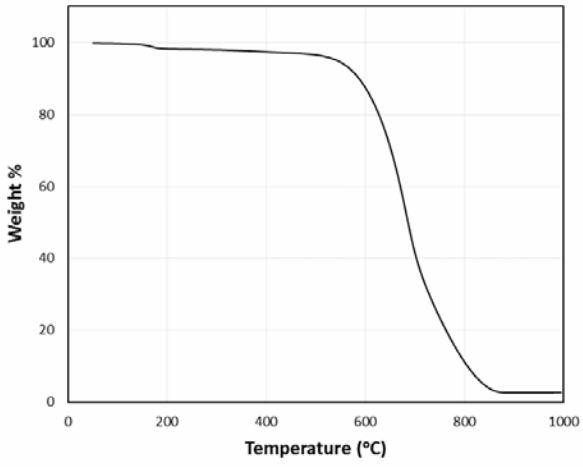

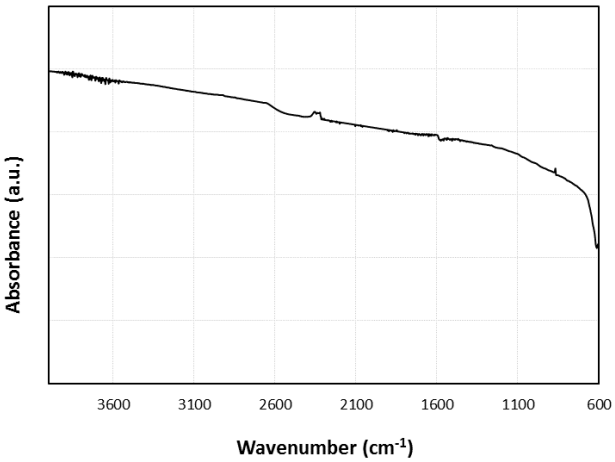

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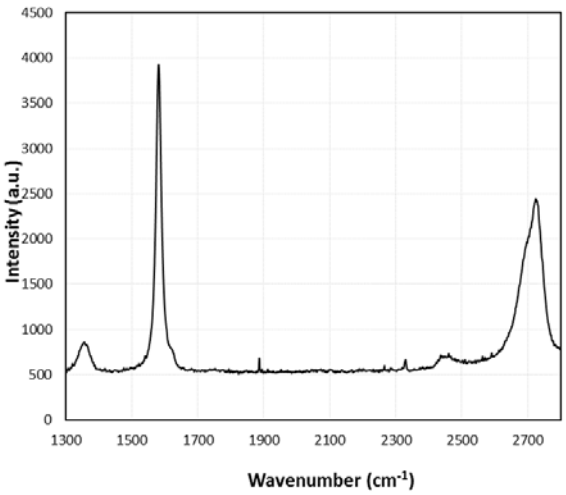

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