



# Material Technical Data Sheet (TDS)

For NTCGPSLL Series

NTC\_TEC\_001

NorGraphene Technologies Canada Ltd.

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## Revision History

Version	Description	Author	Protected Status	Published Date
V1.0	NorGraphene – Material Technical Data Sheet	Rocky K	Protected “A”	February 20, 2018

**IMPORTANT:** Provide this information to customers, users, and related persons (Such as web designer) of this product. Read this MTDS before using of this product.

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## 1. Company Information

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Product Identifier: **Graphene Powder (GPD)**  
Manufacturer's Name: **NorGraphene Technologies Canada (NTC)**  
Manufacturer's Address: **18 Ventnor Way, Ottawa, Ontario, Canada K2J1M3**  
Business #: **722768090RC0001**  
Contact #: **(613)852-6590**  
Supplier's Name and Address: **same as above**  
Product Use: **Graphene Application Products**

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## 2. Product General Information

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Product Code: **NTCGPDLL Serials**

Specific surface area (m <sup>2</sup> /g)	≥700
Color	Dark Grey
Bulk Density	0.017 g/cm <sup>3</sup>
Purity (%)	99.9
Average thickness (nm)	0.8-1.2
Average Particle (lateral) size (μm)	~ 25
Layer	Single (95%)

### 3. Product Special Information

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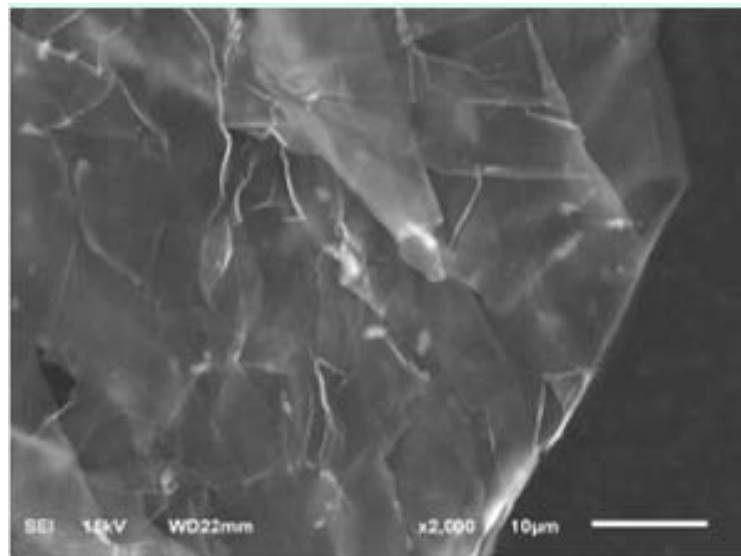
Average Resistivity $\rho$ ( $\Omega\cdot\text{m}$ )	$\leq 7.6 \times 10^{-7}$
Average Conductivity $\sigma$ (S/m)	$\geq 1.315 \times 10^6$

Note: Test by using Four Probe Method

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### 4. Material SEM (Scanning Electron Microscope)

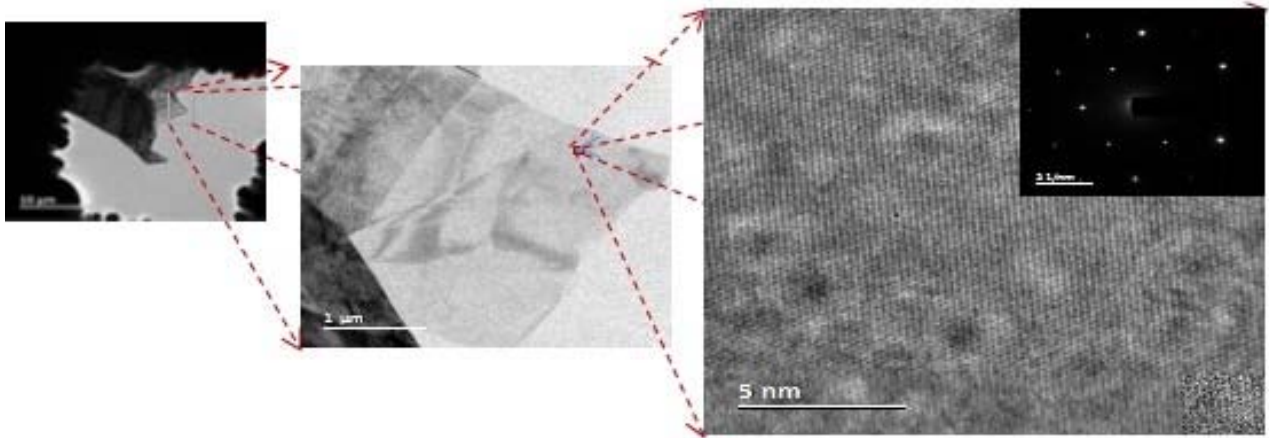
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**2000X NorGraphene graphene (10  $\mu\text{m}$  scale)**

## 5. Material TEM (Transmission Electron Microscopy)

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## 6. Material POM (Polyoxymethylene)

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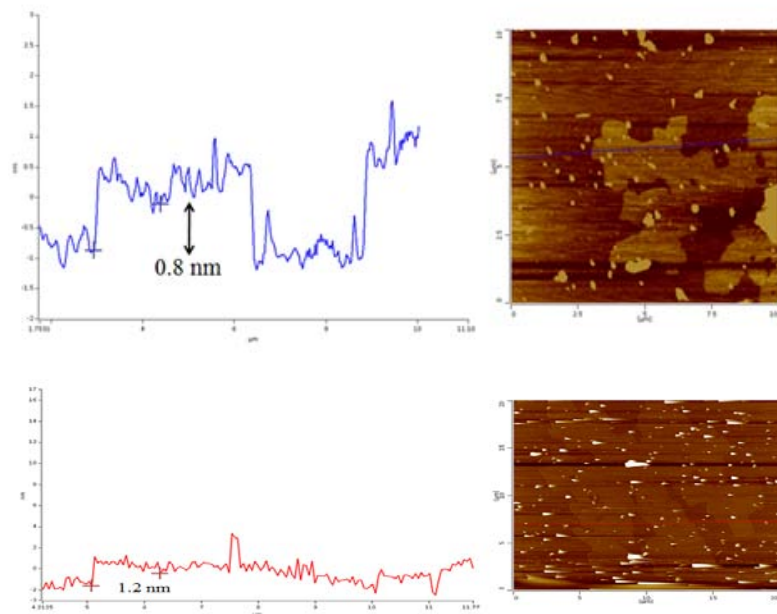


800X NorGraphene graphene

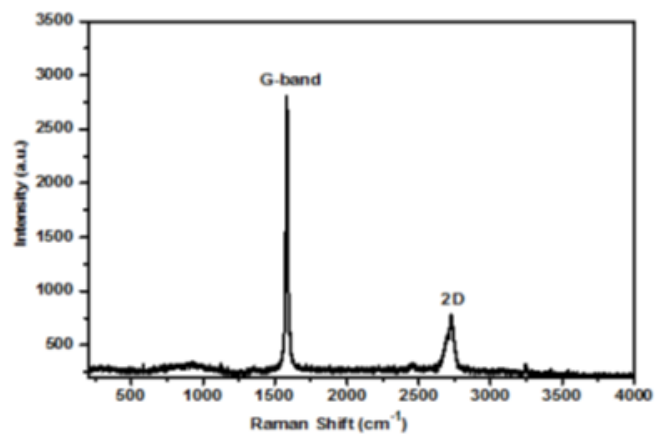
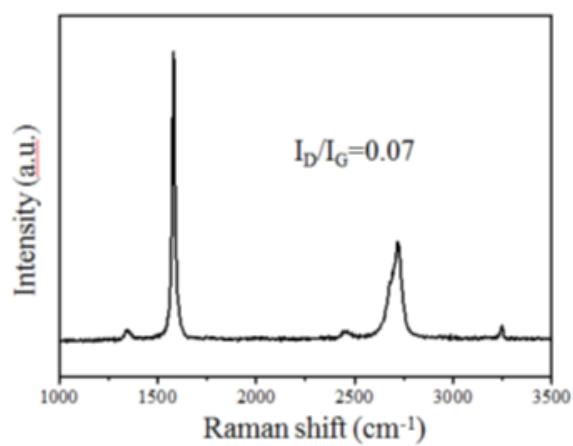


2000X NorGraphene graphene (10 μm scale)

## 7. Material AFM (Atomic Force Microscopy)



## 8. Raman Shift



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## ***9. Disperse Method***

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Disperse in water: **1mg/ml in ultrapure water, ultrasonification for 30 minute.**

Disperse in NMP: **1mg/ml in NMP, ultrasonification for 30 minute.**

Note: user can use any concentration according his application, however the stability of dispersion may not be as good as expect.