



Material Technical Data Sheet (TDS)

For NTCGPSLL Series

NTC_TEC_002

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

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**

2. Product General Information

Product Code: **NTCGPDFL Serials**

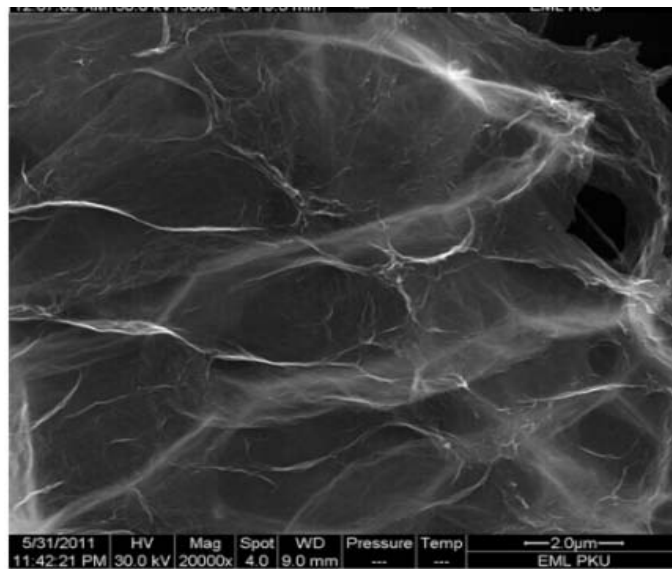
Specific surface area (m ² /g)	200 - 700
Color	Dark Grey
Purity (%)	95
Average thickness (nm)	~ 1.4
Average Particle (lateral) size (μm)	~ 20
Layer	Single (45%) 2 – 7 (55%)

3. Product Special Information

Average Resistivity ρ ($\Omega\cdot\text{m}$)	$\leq 9.8 \times 10^{-5}$
Average Conductivity σ (S/m)	$\geq 10^4$

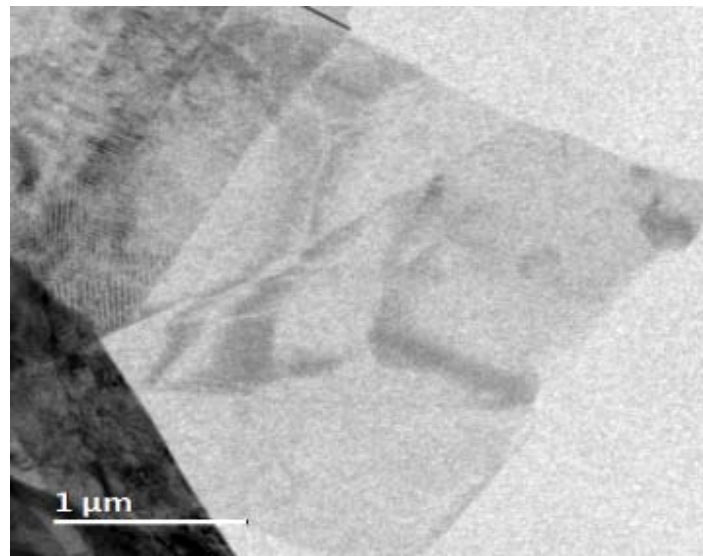
Note: Test by using Four Probe Method

4. Material SEM (Scanning Electron Microscope)

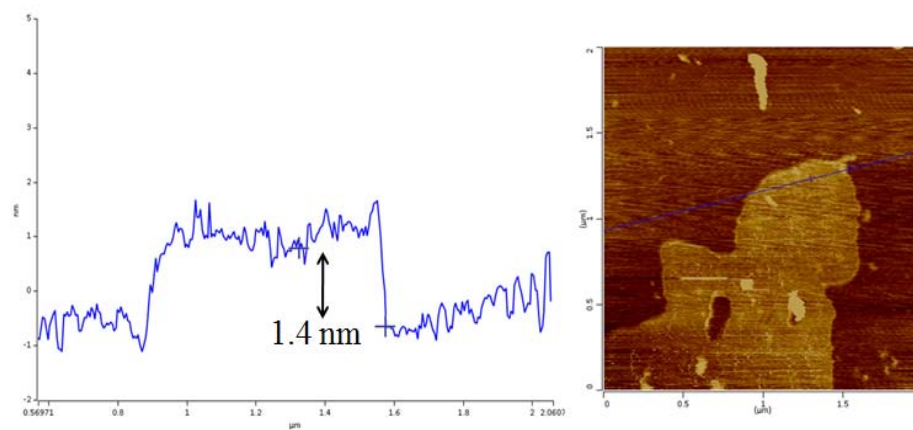


2000X NorGraphene graphene (10 μm scale)

5. Material TEM (Transmission Electron Microscopy)



6. Material AFM (Atomic Force Microscopy)



7. Disperse Method

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.