Last Update: 1/25/2021

Graphenoil®

# **Aminated Graphene Oxide** (fGO)

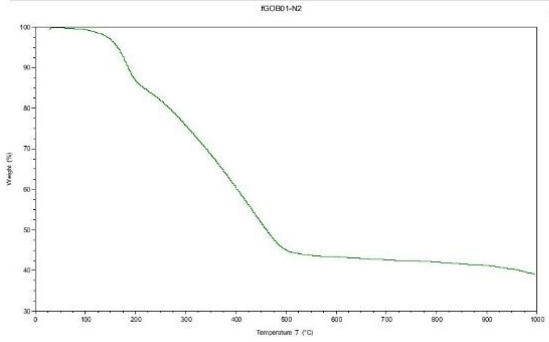
## Properties

| | |
|---|---|
| Form | Powder |
| Amine | Dodecyl amine |
| Color | Black |
| Odor | Odorless |
| Particle size (laser diffraction) | D90: 38.5-44.5 µm |
| | D50: 15.5-16.8 µm |
| | D10: 4.8-5.8 µm |
| Dispersability | low concentrations (<0.1mg/mL) in NMP, DMSO, DMF |
| Apparent density (g/mL) | 0,07-0,10 |
| Humidity ( TGA) | <1% |

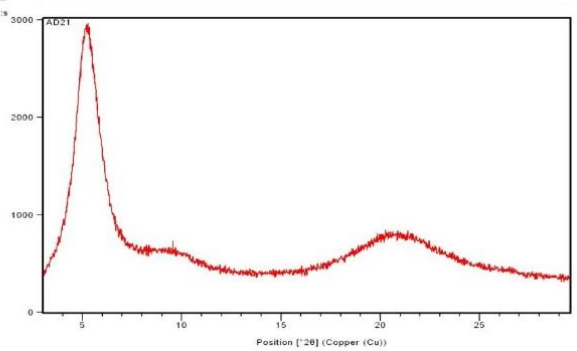
## Elemental Analysis

| | |
|---|---|
| Carbon | 69-74% |
| Hydrogen | 6-9% |
| Nitrogen | 3-5% |
| Sulfur | 0-1% |
| Oxygen | 12-17% |

**TGA**




**XRD**

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**Description:** Amine Functionalized Graphene Oxide Powder. The amine groups of the aminated graphene oxide improves its dispersibility in different polymer matrices (epoxy resins, polyester resins, poliols among others). The key to improving the mechanical properties is the obtention of a homogeneous dispersion of the filler in the matrix and it has been proven in the literature that the amine functionalization is a successful approach to achieve it.

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