

MATERIAL DATASHEET

PRODUCT: GRAPHENE OXIDE

SECTION 1: Product and Company Identification

Product name: Graphene Oxide, solid form
Synonyms: GO paper
Manufacturer: Danubia NanoTech s.r.o.
Ilkovičova 3
84104 Bratislava
Slovakia
Phone: +421264282144

Chemical name: Graphene Oxide
Product use: Laboratory chemicals
CAS Registry No.: 7782-42-5

SECTION 2: Basic Properties

| | |
|-----------------------|--|
| Appearance: | Graphene oxide paper produced by a vacuum filtration |
| Thickness: | ~ 25 µm |
| Odour: | Odourless |
| Melting point: | Powder melts above 3000°C. |
| Bulk density: | Approx. 1 g.cm ³ |
| Stability: | Stable on air. |

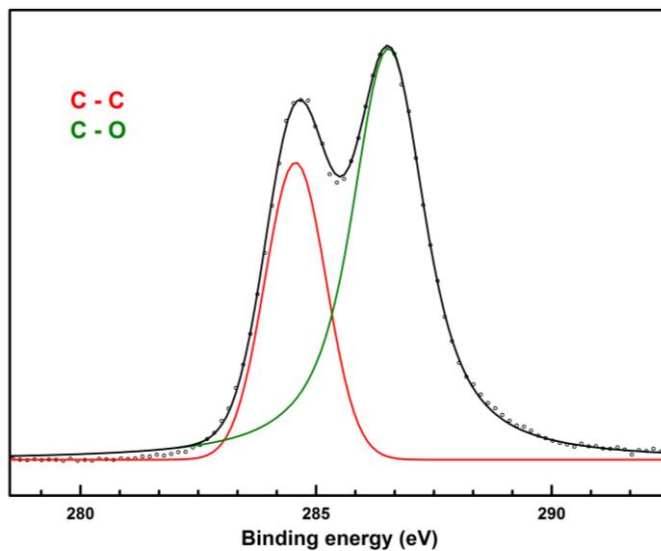
SECTION 3: Elemental Analysis

| | |
|----------|-----------|
| Carbon | 65 – 69 % |
| Oxygen | 29 – 33 % |
| Sulphur | ≈ 1 % |
| Nitrogen | < 1 % |

SECTION 4: Physical properties

Photoelectron spectroscopy (XPS)

XPS spectrum of graphene oxide deconvoluted into components.



Scanning electron transmission microscopy (STEM)

STEM image of a graphene oxide flake showing almost unperturbed hexagonal graphene lattice. Light structures in the figure are carbon impurities induced by the electron beam.

