

PAGE 1 OF 2 REV: 15.07.2018

# **MATERIAL DATASHEET**

# PRODUCT: GRAPHENE OXIDE

# **SECTION 1: Product and Company Identification**

**Product name:** Graphene Oxide, water dispersion

**Synonyms:** GO dispersion in water **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**

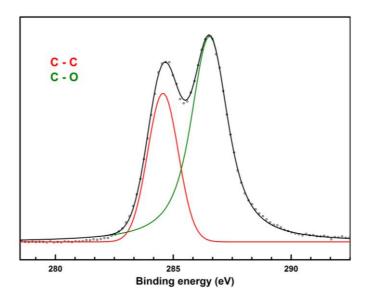
Appearance:	Light brown when dispersed in water
Odour:	Odourless
Melting point:	Powder melts above 3000°C.
Bulk density:	Approx. 1 g.cm <sup>3</sup>
Solubility in water:	Dispersible in water.
Stability:	Stable on air.

#### **SECTION 3: Elemental Analysis**

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

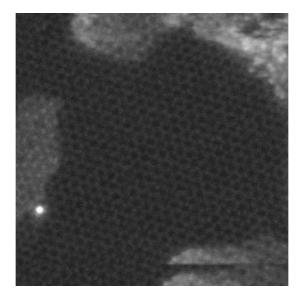
# Photoelectron spectroscopy (XPS)

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.



PAGE 2 OF 2 REV: 15.07.2018