



# Borhan Nano Scale Innovators Knowledge-Based Co.

## Reduced Graphene Oxide (rGO) Nanocolloid

### Introduction

The structure of graphene oxide is similar to graphene - a 2D sheet of carbon atoms - which contains residual oxygen, heteroatoms and structural defects and has interesting properties that can be different than those of graphene. By reducing graphene oxide, the oxidized functional groups are removed, to obtain a graphene material. This graphene material is called rGO.

### Specifications

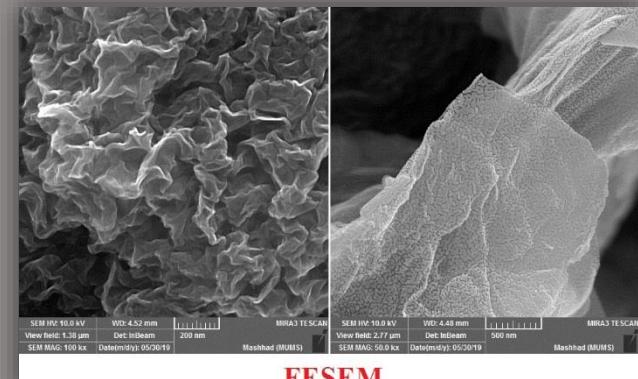
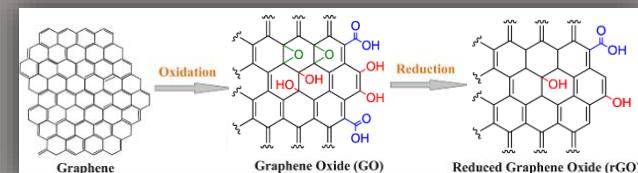
Chemical composition	$C_xO_yH_z$
Concentration (mg/ml)	1,2,5
Morphology	Sheet
Thickness (nm)	Less then 2
Length (μm)	1-5
Color	Black
Form	Liquid
Product No.	777684

### Applications

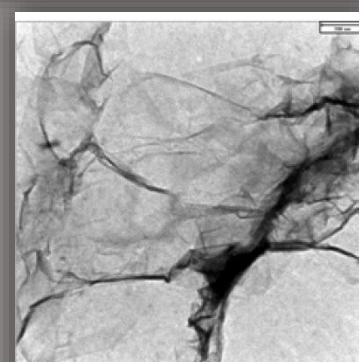
- Microwave absorbing material
- Drug delivery systems
- Energy storage (lithium ion batteries, Supercapacitors)
- Composite materials
- Field effect transistors
- Electronics (Transparent electrode, Hole transport layer in polymer solar cells and LEDs, Dye-sensitized solar cells and organic solar cells,)
- Biosensors
- Water purification

### Advantages

- Excellent mechanical properties
- More stable in organic solvents
- Good electrical and thermal conductivity
- High surface area



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