



# Borhan Nano Scale Innovators Knowledge-Based Co.

## Graphene Oxide (GO) Nanocolloid

### Introduction

GO is a unique material that is a single monomolecular layer of graphite with various oxygen containing functionalities such as epoxide, carbonyl, carboxyl and hydroxyl groups. It has unique mechanical, optical, thermal and electrochemical properties.

### Specifications

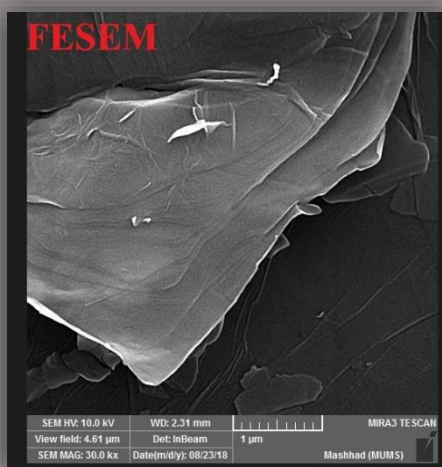
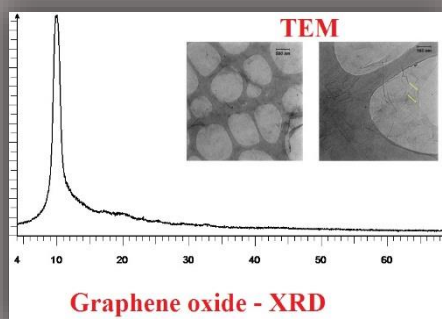
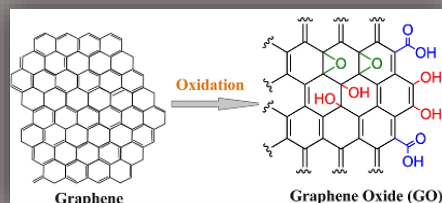
Chemical composition	$C_xH_yO_z$
Concentration (mg/ml)	5
Morphology	Sheet
Thickness (nm)	Less than 2
Length ( $\mu\text{m}$ )	2
Color	Black
Form	Liquid
Product No.	795534

### Applications

- Microwave absorbing material
- Nanomedicine and Drug delivery systems
- Cellular imaging
- 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

- High current density
- Ballistic transport (highest electron transfer rate)
- Very high electron mobility at room temperature
- Chemical ineffectiveness
- High thermal and electrical conductivity
- Extraordinary light transmission and hydrophobicity



@nano\_scale



05138764957



05138764957



info@nano-meter.ir



nano-meter.ir



Room 421, Development Center No. 4, Ferdowsi  
University of Mashhad, Mashhad, Iran