

PRODUCT DATASHEET

PROPERTIES

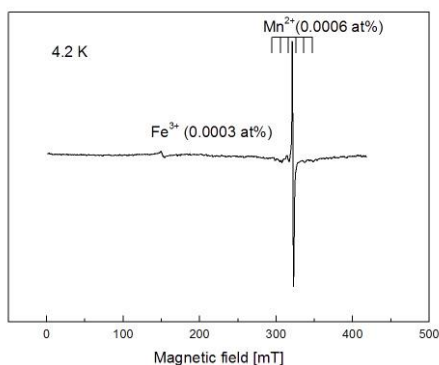
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|------------------------------------|-----------------------------------|
| FORM | Extra-large Graphene Oxide flakes |
| PRODUCTION METHOD | Modified Hummers' method |
| SOLVENT | Water |
| COLOR | Brown |
| TYPICAL FLAKE DIAMETER | 5-30 μm |
| THICKNESS OF A SINGLE LAYER | 0,8-1,2 nm |

ELEMENTAL ANALYSIS*

*measurements for sample dried at 60°C

| | |
|-----------------|---------|
| CARBON | 40-50 % |
| OXYGEN | 39-49 % |
| HYDROGEN | 1-4 % |
| SULFUR | <2% |
| NITROGEN | <1% |

NO CONTAMINATION OF MANGANESE



Manganese content: 0,0006%

Careful washing process provides high purity of graphene oxide dispersion. Manganese amount was measured using EPR (electron paramagnetic resonance) to verify the high purity of the material. Mn contamination is, due to the production process, the common defect of commercially available graphene oxide. Because of the high purity, the product does not show toxicity in living cells.

LARGE GRAPHENE OXIDE FLAKES

Typical diameter of GO flakes: 5-30 μm

The synthesis method allows for obtaining large, monolayer graphene oxide flakes. The oxidation process is repeatable and ensures full oxidation, confirmed by elemental analysis during quality control

