



# Graphene Oxide for Packaging Solutions





# Why Our Derivative Outperforms Conventional Graphene

*Solving the problems that prevent commercial viability*

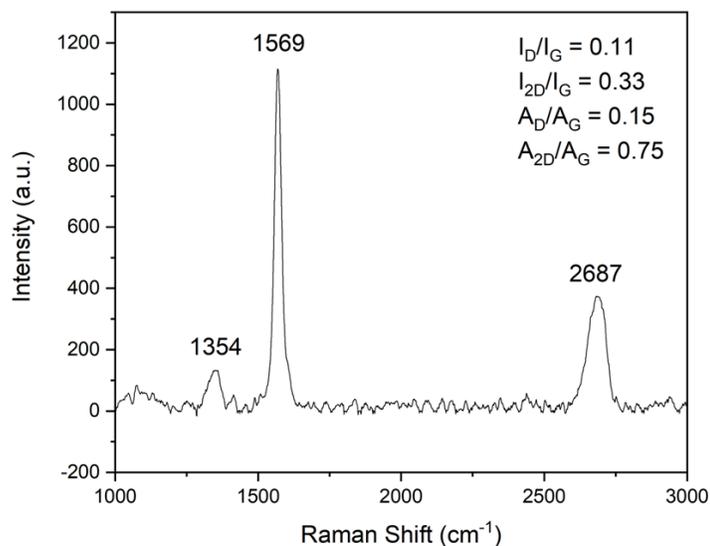
## Our Graphene Oxide

- Dispersion: Simple mechanical stirring
- Loading: 0.5-1%
- Defects: Minimal—controlled synthesis
- Stability: Zero re-agglomeration
- Cost: 3-5x lower material usage

## Conventional Graphene

- Dispersion: Hours of probe sonication
- Loading: 3-5%
- Defects: High— inconsistent quality
- Stability: Re-agglomerates during storage
- Cost: Expensive, excessive loading

**Raman Characterization of Our Derivative:**



**Technical Specification of Base Material**

|                             |                            |
|-----------------------------|----------------------------|
| Specific Surface Area (BET) | ~250-350 m <sup>2</sup> /g |
| Thickness                   | 1-5 nm                     |
| Odour                       | Odourless                  |
| Solubility                  | Insoluble                  |
| Dispersibility              | D.I Water, DMF, DMSO, NMP  |

The data contained in this brochure is based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, the data does not relieve processors from carrying out their own investigations and tests; neither does the data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose.