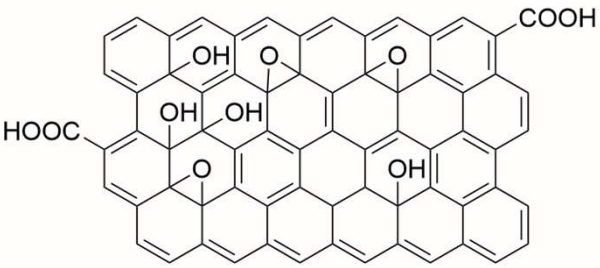
FUJIFILM
Value from Innovation

Wako

Functional Material

Graphene Oxide

This product is a graphene oxide that Professor Nishina of Okayama University is working on research and development. It is a high-quality graphene oxide with a single-layer and a smaller average size than graphene oxide on the market because it was developed using a unique manufacturing method.



Graphene Oxide (GO)

Appearance (Powder)

Features

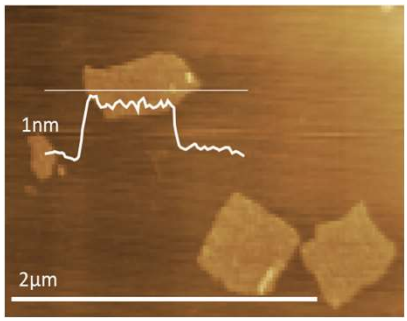
◆ High Oxygen Content

◆ Average Size：1 μm

◆ Impurity Metals：Mn<1%, K<1%

◆ Powder type is dispersible in water and polar organic solvents*.

＊：PC (Propylene Carbonate)、NMP (1-Methyl-2-pyrrolidone) etc.



AFM analysis (Graphene Oxide)

Application Example

- Organic Synthesis Catalyst[i)]
- Polymer (Grafting Materials)[ii)]
- Separation Membrane[iii)]
- Fuel Cell Catalyst
- Electric Double-layer Capacitor
- Biosensor etc.

Products

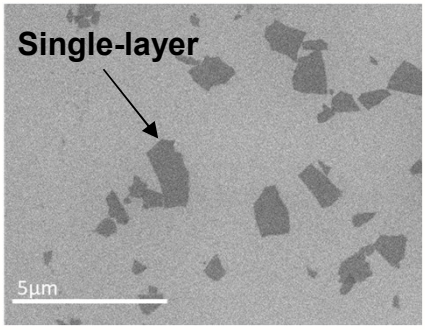
Code No.	Product Name	Storage Condition	Pack Size
357-46361	Graphene Oxide, Powder	Keep at 2～10 ℃	100 mg
353-46363			500 mg
354-46371	Graphene Oxide Dispersion in water(10 mg/mL)	Keep at 2～10 ℃	5 mL
352-46372			25 mL
350-46373			100 mL

Depending on your request, we can also provide custom service such as solvent dispersion and chemical modification in addition to the above products. Please contact our sales office or agency.

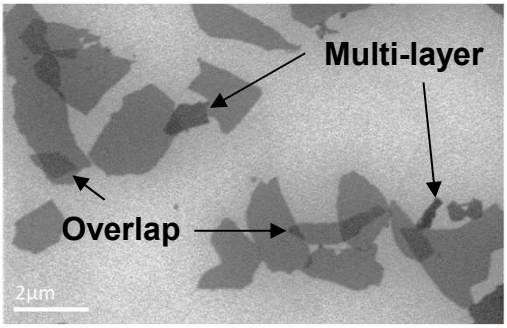
Analysis example of graphene oxide

Comparison of SEM analysis of graphene oxide

Our Product



Competitor



Our product has less multi-layer and overlap than the other competitors, so it is excellent in forming self-standing membrane.

Application example of graphene oxide (Separation Membrane)

Air-dried Self-standing membrane

Self-standing membrane after vacuum filtration

<References>

i) Nishina, Y., Hashimoto, H., Yamamoto, S. and Kinoshita., H .: *Nanoscale*., **6**, 6501(2014)

ii) Nishina, Y., Shibahara, R. and Kamiya, K.: *Nanoscale*., **3**, 5823(2021)

iii) Joshi, R. K., Alwarappan, S., Yoshimura, M., Sahajwalla, V. and Nishina, Y .: *Applied materials today*, **1**, 1 (2015).

FUJIFILM Wako Laboratory Chemicals site
https://labchem-wako.fujifilm.com

FUJIFILM Wako Pure Chemical Corporation
1-2, Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan
Tel: +81 6 6203 3741 Fax: +81 6 6203 1999
ffwk-cservise@fujifilm.com

FUJIFILM Wako Chemicals U.S.A. Corporation
1600 Bellwood Road, Richmond, VA 23237, U.S.A.
Toll-Free (U.S. only): +1 877 714 1920
Tel: +1 804 271 7677 Fax: +1 804 271 7791
wkuslabchem@fujifilm.com

FUJIFILM Wako Chemicals Europe GmbH
Fuggerstr 12, 41468 Neuss, Germany
Tel: +49 2131 311 0 Fax: +49 2131 311 100
labchem_wkeu@fujifilm.com

FUJIFILM Wako Chemicals (Hong Kong) Limited
Room 1111, 11/F, International Trade Centre, 11-19 Sha Tsui Road, Tsuen Wan, N.T., Hong Kong
Tel: +852-2799-9019 Fax: +852-2799-9808
wkhk.info@fujifilm.com

FUJIFILM Wako (Guangzhou) Trading Corporation
Room 3003, 30/F., Dong Shan Plaza 69, Xian Lie Zhong Road, Guangzhou, 510095, China
Tel: +86-20-8732-6381(Guangzhou) Tel: +86-21-6288-4751(Shanghai)
Tel: +86-10-6413-6388(Beijing)
wkgz.info@fujifilm.com

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