



Safety Data Sheet

Release Date: 26/06/2019

Version 3.0

Revision Date: 26/06/2019

Company
Marble Capital Partners Ltd
Third floor, 207 Regent Street
London, W1B 3HH
United Kingdom

Known Trading Names:
Telephone Number:
Wholesale-Graphene.com
+44 (0) 208 123 3271

Emergency Contact Number:
UK +44 (0)870 8200418 (CHEMTREC)
USA: 800-424-9300 (CHEMTREC)
Outside USA: 001-703-527-3887 (CHEMTREC)

Section 1

Identification of Substance

Product Name Graphene Oxide
Cat No WG—GO-01
CAS-No 1034343-98-0
Synonyms mineral Carbon
Recommended Use Additive, laboratory chemicals, manufacturing substances
Uses advised against Not for food, drug, pesticide or biocidal product use

SECTION 2

Hazards Identification

Classification & Label Elements
The substance is classified and labelled according to the Globally Harmonized System (GHS) Regulation (EC) No 1272/2008. Not a hazardous substance or mixture according to Regulation (EC) No.67/548/EEC
Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Signal Word Danger
Signal Word (GHS-US, GHS-CA) Warning

Serious Eye Damage/Eye Irritation Category 2
Specific target organ toxicity (single exposure) Category 3

Target Organs Respiratory system.



Danger Eye Contact May cause eye irritation
Skin Contact No known hazards, but may be mildly irritating
Inhalation May cause irritation to respiratory tract
Ingestion No known hazards, but may irritate gastrointestinal tract
Health Effects Mucus membranes and respiratory tract.
Storage Store in a well ventilated place. Keep container tightly closed Store locked up

Additional Information
Acute and chronic high concentration of dusts may be irritating to eyes, skin
Information pertaining to particular dangers for man and environment
R36/37 Irritating to eyes and respiratory system.

Hazard statements (GHS-US, GHS-CA) May form combustible dust concentrations in air

Other Hazards High slip hazard due to leaking or spilling product. Graphite dust can cause an electrical shortage.

SECTION 3**Composition/Information on Ingredients**

Synonyms	Multi-Layer Graphene Oxide Powder, Graphite Oxide Powder, GO Powder
IUPAC name	Carbon
EC No	801-282-5
CAS No	1034343-98-0
Weight	99%

SECTION 4**First Aid Measures**

Description of first aid measures	If inhaled or if breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of skin contact, clean/wash off with soap and plenty of water. In case of eye contact, flush eyes with water as a precaution. <u>If swallowed never give</u> anything by mouth to an unconscious person. Rinse mouth with water.
Notes to Physician	Treat symptomatically
Most important symptoms and effects both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11
Indication of any immediate medical attention and special treatment	No data available

SECTION 5**Fire Fighting Measures**

Extinguishing	Suitable extinguishing media use water spray, alcohol-resistant foam, dry chemical or Carbon dioxide.
Special hazards arising from the substance or mixture	Carbon oxides
Further information	No data available
Extinguishing Media	No information available
Flash Point	No information available
Method	No information available
Auto-ignition Temperature Explosion Limits Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available
Specific Hazards Arising from the Chemical	Keep product and empty container away from heat and sources of ignition.
Hazardous Combustion Products	None known
Protective Equipment and Precautions For Fire Fighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. NFPA 6.

SECTION 6**Accidental Release Measures**

Personal precautions, protective equipment and emergency procedures	Avoid dust formation. Avoid breathing vapours, mist or gas. For personal protection see section 8.
Environmental precautions	No special environmental precautions required.
Methods and materials for containment and cleaning up	Sweep up and shovel. Keep in suitable, closed containers for disposal.
Reference to other section	For disposal see section 13.

SECTION 7

Handling and storage

Precautions for safe handling	Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2
Conditions for safe storage, including any incompatibilities	Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Specific end use(s)	Apart from the uses mentioned in section 1 no other specific uses are stipulated

SECTION 8

Exposure Controls/Personal Protection

Control Parameters	It is recommended that exposure levels be kept as low as possible, following good industrial hygiene practices, in order to minimize any potential lung effects. Exposure to skin should also be minimized.
Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Engineering Measures	Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.
Ventilation	A local or general exhaust system is recommended.
<u>Personal Protective</u>	
Equipment Eye/Face Protection	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin and Body Protection	Wear appropriate protective gloves and clothing to prevent skin exposure. Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice. General protective and hygienic measures The usual precautionary measures for handling chemicals should always be followed. Always keep away from foods, beverages and any feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid contact with the eyes. Avoid contact with the eyes and skin.
Respiratory Protection	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

SECTION 9

Physical & Chemical Properties

Appearance	Powder form.
Auto-ignition Temperature	Not available
Boiling Point	Not available
Colour	Black
Decomposition Temperature	622°C Partition coefficient
Evaporation Rate	Not available
Explosive Properties	Not available
Flammability Limit % (Higher)	Not available
Flammability Limit % (Lower)	Not available
Flash Point	Not available
Freezing Point	Not available
Ignition Temperature:	Dispersed dust cloud - >600°C, deposited dust - >365°C
Melting Point	Approximately 3600°C.
Odor	Odourless
Oxidising Properties	Not available
Partition Coefficient	Not available
pH	Not available
Relative Density	0.200 g/cm ³ (at 20°C)
Solubility	Negligible
Solubility in Water	Dispersion
Vapor Density	Not available
Viscosity	Not available

SECTION 10**Stability & Reactivity**

Reactivity	Oxidising agents
Chemical stability	Stable under normal temperatures and pressures
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use
Conditions to avoid	Incompatible materials, dust generation. Avoid heat, sparks, flames and other sources of ignition
Incompatible materials	Strong oxidizing substances
Hazardous decomposition products	Carbon monoxide (CO) and carbon dioxide (CO2)

SECTION 11**Toxicological information****Acute Toxicity**

Product Information	No acute toxicity information is available for this product
Component Information	No information available
Toxicologically Synergistic Products	No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation	No information available
Sensitization	No information available
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	ACGIH	IARC	Mexico	NTP	OSHA
Graphene	1034343-98-0	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects	No information available
Reproductive Effects	No information available
Developmental Effects	No information available
Teratogenicity	No information available
STOT (Single Exposure)	None known
STOT (Repeated Exposure)	None known
Aspiration hazard	No information available
Symptoms / effects, both acute & delayed	No information available
Endocrine Disruptor Information	No information available
Other Adverse Effects	The toxicological properties have not been fully investigated

SECTION 12**Ecological information**

Ecotoxicity	Do not empty into drains or sewer water systems . Follow all hazardous waste guidelines when disposing hazardous materials.
Persistence and Degradability	No information available
Bioaccumulation/ Accumulation	No information available
Mobility	No information available

SECTION 13**Disposal Considerations**

Waste Disposal Methods	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.
-------------------------------	---

SECTION 14**Transport Information**

UN Number	ADR/RID , IMDG , IATA , DOT (US)
UN Proper Shipping Name	
DOT (US)	Not dangerous goods
ADR/RID:	Not dangerous goods
IMDG:	Not dangerous goods
IATA:	Not dangerous goods

Transport Hazard Class(es)	ADR/RID , IMDG , IATA
Packaging Group	Not classified
Environmental Hazards	No
Marine Pollutant	No
Special Precautions For User	No data available

SECTION 15 Regulatory information

SARA 302 Components SARA 302	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA 313 Components SARA 313	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III
Section 313 - SARA 311/312	Hazards
Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006	

The EU chemicals legislation applies to all industry sectors dealing with chemicals and along the entire supply chain. It makes companies responsible for the safety of chemicals they place on the market. Reach is a regulation of the European Union, adopted to improve the protection of human health and the environment from the risks that can be posed by chemicals, while enhancing the competitiveness of the EU chemicals industry.

This material is listed on the US Toxic Substances Control Act (TSCA) Inventory and the following chemical inventories:

Canadian Domestic Substances List (DSL),
European Inventory of Existing Commercial Chemical Substances (EINECS),
Korean Existing Chemicals List (ECL),
Australian Inventory of Chemical Substances (AICS),
the Philippines Inventory of Chemicals and Chemical Substances (PICCS)
and the Swiss Giftliste 1 Inventory of Notified New Substances.

Additional Information	This substance is not regulated in Japan and excluded from the Japanese Chemical Substances Control Law according to the Japanese Ministry of Economy, Trade and Industry, formerly the Ministry of International Trade and Industry (MITI).
Hazard Symbols	Eye Irritant
Risk Phrases	Irritating to eyes and respiratory system.
Safety Phrases	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

National regulations All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Information about limitation of use: For use only by technically qualified individuals.

SECTION 16 Other Information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS) Health Flammability Reactivity BASIS 1 0 0 Synthetic graphite powder.

Disclaimer

This information is based on our present state of knowledge and our research into available scientific literature as well as information obtained from other sources. Use of this information shall not establish a legally binding relationship. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or any process. It does not represent any guarantee of the properties of the product. Marble Capital Partners Ltd takes no responsibility regarding the accuracy of the scientific literature or any third-party information and, therefore, cannot guarantee any specific material properties. Marble Capital Partners Ltd shall not be held liable for any damage resulting from handling or from contact with the product. It is the user's responsibility to satisfy him/her self as to the suitability of such information for his own particular use.

Document Prepared By	Regulatory Affairs, Marble Capital Partners Ltd, Third floor, 207 Regent Street London, W1B 3HH, United Kingdom
-----------------------------	--

Email	enquiries@wholesale-graphene.com
--------------	----------------------------------

END OF SDS