



Safety Data Sheet

Version 1.0

Revision Date 04/10/2019

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name:	Graphene oxide, powder, 15-20, 4-10% edge-oxidized
Product trade name:	ICONSMAT-GO
Brand:	Institute of Construction Materials
SKU:	GO2H2SO4

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses:	For R&D use only, Not for pharmaceutical, household or other uses.
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1.3 Details of the supplier of the safety data sheet

Company:	Institute of Construction Materials 56 Second Ave. Kingswood, NSW, 2747 Australia
Telephone:	(+61)416731647
Email for SDS:	info@iconsmat.com.au

1.4 Emergency telephone number:

Emergency number:	(+61)416731647
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Section 2: Hazards identification

2.1 GHS Classification:

Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements:

Not a hazardous substance or mixture.

2.3 Other hazards:

Graphene oxide is electrically conductive. Care should be taken, therefore, to avoid accumulation of GO dusts or powders in places where these accumulations could cause shorting of electrical switches, circuits or components.

Section 3: Composition/information of ingredients

Substance name:	Graphene oxide
Description:	Graphene oxide is a thin layer of partially oxidized carbon; it is a single, tightly packed layer of carbon atoms that are bonded together in a hexagonal honeycomb lattice.

Section 4: First aid measures

4.1 Description of first aid measures

If inhaled



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If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water

In case of eye contact

Flush eyes with water as a precaution

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water

4.2 Most important symptoms and effects, both acute and delayed

Inhalation	It may cause irritation to respiratory tract/inhalation
Ingestion	No effect recorded
Skin contact	It may cause skin irritation
Eye contact	It may cause eye irritation
Delayed effects	No delayed effects known

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Contact medical centre immediately in case of ingestion or inhalation of a large amount of product. Specific treatment: No specific treatment.

Section 5: Firefighting measures

5.1 Extinguishing media

The substance is not combustible, use extinguishing measures that are appropriate to local circumstance and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas. For personal protection see section 8.

6.2 Environmental precautions

No special environmental precautions.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Keep suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific.

Section 8: Exposure control/personal protection

8.1 Control parameters
Components with workplace control parameters
Contains no substance with occupational exposure limit values.

8.2 Exposure controls
Appropriate engineering controls
General industrial hygiene practice.
Personal protective equipment



Eye/face protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Body Protection
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
No special environmental precautions required.

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Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Form: Powder Color: Black
Odour	Odourless
Odour threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	1.8 g/cm ³
Water solubility	No data available
Partition coefficient	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

Section 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.



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Other decomposition products - No data available
In the event of fire: see section 5

Section 11: Toxicological information

Acute toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Section 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

Section 13: Disposal considerations

13.1 Waste treatment methods

Product



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Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

Section 14: Transport information

14.1 UN number

ADR/RID: - IMDG: - IATA-DGR: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA-DGR: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA-DGR: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA-DGR: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA-DGR: no

14.6 Special precautions for user

None

14.7 Incompatible materials

Strong oxidizing agents

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

AICS:	Not in compliance with the inventory – Graphene oxide, anhydrous
DSL:	This product contains the following components that are not on the Canadian DSL nor NDSL. - Graphene oxide, anhydrous sheets.
ENCS:	Not in compliance with the inventory - Graphene oxide, anhydrous sheets
ISHL:	Not in compliance with the inventory - Graphene oxide, anhydrous sheets
KECI:	Not in compliance with the inventory - Graphene oxide, anhydrous sheets
NZIoC:	Not in compliance with the inventory - Graphene oxide, anhydrous sheets
PICCS:	Not in compliance with the inventory - Graphene oxide, anhydrous sheets



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Section 16: Other information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. The Institute of Construction Materials (ICONSMAT) and its affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. Use of this information shall not establish a legally binding relationship.

The information provided in this SDS must be considered as a starting point for a comprehensive program of health and safety in your company. If further data on the product is required to perform your risk assessment, contact us and we will try to assist as much as possible.