

Material Safety Data Sheet

Graphene Platelet

Revision Date: 11/01/2011

Date Issued: 02/09/2009

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name	Graphene
Product code	CP-0067-HP
Supplier	IoLiTec Ionic Liquids Technologies GmbH Salzstrasse 184 D-74076 Heilbronn Germany
Telephone	+49 (0)7131 – 898390
Fax	+49 (0)7131 – 89839109
Emergency telephone	+49 (0)179 – 5322578
Email	msds@iolitec.de

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (67/548/EEC or 1999/45/EC)

Caution! Substance not yet fully tested. Risks cannot be excluded if the product is handled inappropriately. For laboratory use only!

Classification (REGULATION (EC) No 1272/2008)

Caution! Substance not yet fully tested. Risks cannot be excluded if the product is handled inappropriately. For laboratory use only!

Serious eye damage/Eye irritation, Category 2, H319

Specific Target Organ Toxicity - Single exposure:

Respiratory tract irritation, Category 3, H335

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2.2 Label elements

Labelling (67/548/EEC or 1999/45/EC)

Hazard description:

Label for supply



Xi, Harmful

Risk phrases

R36/37: Irritating to eyes and respiratory system.

Safety phrases

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36: Wear suitable protective clothing

Labelling (REGULATION (EC) No 1272/2008, GHS)

Hazard statements



Warning

H-phrases

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

Precautionary statements

P-phrases

P261: Avoid breathing dust/fume/gas/mist/vapours/spray .

P280: Wear protectic gloves/protective clothing/eye protection/face protection .

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P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362: Take off contaminated clothing and wash before reuse.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient name	Graphene platelet
CAS No.	1034343-98-0
Empirical Formula	-
Molecular weight	-

4 FIRST AID MEASURES

General	Contaminated clothing should be removed and washed before being reused.
Inhalation	Remove from exposure and move to fresh air immediately. Get medical aid.
Ingestion	Get medical aid. Wash mouth out with water.
Skin	Get medical aid. Flush skin with plenty of water and soap and rinse thoroughly.
Eyes	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

5 FIRE FIGHTING MEASURES

Extinguishing Media	CO ₂ , extinguishing powder or water.
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Unusual fire & explosion hazards	Carbon monoxide (CO) can be released in case of fire
Protective measures in fire	Wear self-contained breathing apparatus as combustion may produce hazardous fumes.

6 ACCIDENTAL RELEASE MEASURES

General Information	Use proper personal protective equipment
Spills/Leaks	Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Do not let this chemical enter the environment without proper governmental permits.

7 HANDLING AND STORAGE

Handling	Minimize dust generation and accumulation. Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Avoid ingestion and inhalation.
Storage	Store in a cool, dry place. Store in a tightly closed container. Good ventilation at the workplace is required. Store away from oxidizing agents, from halogens, from acids.

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8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls Use adequate chemical fume hood designed for hazardous chemicals.

Exposure Limits

Graphite (mg/m³)

ACGIH TLV: 2; Belgium TWA 2.5; Finland TWA 5; France VME 2; Germany MAK 6; Ireland TWA 5; Korea TLV 2; Netherlands MAC-TGG 2; Poland TWA 2; Sweden NGV 5 (dust); Switzerland MAK-W 2.5; United Kingdom 5-LTEL; USA PEL 15 mppcf

Personal Protective Equipment

Eyes Wear chemical splash goggles.
Skin Wear appropriate protective gloves to prevent skin exposure.
Clothing Wear appropriate protective clothing to prevent skin exposure
Respirators Wear appropriate respirator when high concentrations are present

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance Black powder
Color Black
Odor/taste No characteristic odor.
Melting Point N/A
Boiling Point N/A
Density: N/A

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10 STABILITY AND REACTIVITY

Chemical Stability Stable under normal temperatures and pressures.

Conditions to Avoid Incompatible materials, dust generation.

Incompatibilities with Other Materials Strong oxidizing agents, acids, Halogens, Interhalogens, Alkali metals.

Hazardous Decomposition Products Carbon Monoxide (CO) and Carbon Dioxide (CO₂)

11 TOXICOLOGICAL INFORMATION

Ingestion Harmful if swallowed.

Skin causes irritation.

Eyes causes irritation.

Inhalation Inhalation of graphite has caused pneumoconiosis in exposed workers

12 ECOLOGICAL INFORMATION

Environmental hazards Do not empty into drains.

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13 DISPOSAL CONSIDERATIONS

Disposal method Contact specialist disposal companies.
Dispose of in accordance with Local Authority requirements. Recover and reclaim or recycle, if practical.

14 TRANSPORT INFORMATION

General Not classified as dangerous for transport purposes.
UN No. 0
Road transport notes Not classified as dangerous for road transport.
Rail transport notes Not classified as dangerous for rail transport.
Sea transport notes Not classified as dangerous for sea transport.
Air transport notes Not classified as dangerous for air transport.

15 REGULATORY INFORMATION

In accordance with local and national regulations.

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16 OTHER INFORMATION

DISCLAIMER

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