

Material Safety Data Sheet

Graphite Powder

Revision Date: 01/12/2010

Date Issued: 11/24/2006

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

| | |
|----------------------------|---|
| Product name | Graphite |
| Product code | CP-0018-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)

Irritating to eyes and respiratory system.

Classification (REGULATION (EC) No 1272/2008)

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.

3 COMPOSITION/INFORMATION ON INGREDIENTS

| | |
|--------------------------|-----------------|
| Ingredient name | Graphite powder |
| CAS No. | 7782-42-5 |
| Empirical Formula | C |
| Molecular weight | 12.01 amu |

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. |
| Unusual fire & explosion hazards | Carbon monoxide (CO) can be released in case of fire |

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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.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls

Use adequate chemical fume hood designed for hazardous chemicals.

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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

Solid

Color

Black

Odor/taste

No characteristic odor.

Melting Point

3652-3697 °C

Boiling Point

N/A

Density:

2.25 g/cm³

10 STABILITY AND REACTIVITY

Chemical Stability

Stable under normal temperatures and pressures.

Conditions to Avoid

Incompatible materials, dust generation.

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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. |
|------------------------------|---------------------------|

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. |
|----------------|---|

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| | |
|-----------------------------|---|
| 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.

16 OTHER INFORMATION

DISCLAIMER

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