# SAFETY DATA SHEET

## SDS NA-SC106

## Section 1 – Product and Supplier Identification

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|---|---|
| **Product identifier used on the label:** | Arc Carbons |
| **Other means of identification:** | Not applicable |
| **Uses (and restrictions):** | Arc carbons for high intensity lighting |
| **Supplier and contact information:** | |
| Morgan Advanced Materials<br>251 Forrester Drive<br>Greenville, SC 29607 USA | +1(864)458-7777<br>www.morganspecialitygraphite.com |
| **Emergency phone number:** | +1(864)458-7777<br>08:00-17:00 local time M-F |

## Section 2 – Hazard Identification

This product is sold to be used as a replacement part in equipment designed and sold by another company. Read and follow safety information and procedures provided by the equipment manufacturer related to high intensity light and ventilation. This SDS provides further information about materials used in the part.

**Classification:**
This component is an “article” and therefore not regulated as a chemical under the US OSHA Hazard Communication Standard. The materials contained in this product are not classified as hazardous under the Globally Harmonized System of Classification and Labelling and the US OSHA Hazard Communication Standard.

| | |
|---|---|
| **Signal word, symbols, hazard and precautionary statements:** | Not applicable (because not classified as hazardous) |

**Other information about health hazards:**
If this product is handled or used in a manner that generates dust:
Dust from this material may cause minor irritation of skin and eyes, primarily through mechanical abrasion.

**Other information about physical hazards:**
If this product is handled or used in a manner that generates dust:
Carbon/graphite dust is electrically conductive and dust accumulations on electrical equipment can cause short circuits resulting in electrical shock, fire or damage to equipment. Accumulations of dust may present a combustible dust hazard. Maintain good housekeeping.

**Warning: When in use, arc carbons are extremely hot. When in use, arc carbons give off high intensity light that can damage eyes. Follow safety precautions advised by the equipment manufacturer.**

## Section 3 – Composition

| Component | CAS Registry Number | Concentration % by weight |
|---|---|---|
| Graphite | 7782-42-5 | 0-95% |
| Carbon | 7440-44-0 | 0-95% |
| Rare earth compounds | 68188-85-2 | <5% |
| Copper[1] | 7440-50-8 | <5% |

[1] Copper is present as external copper plating on some grades.

## Section 4 – First Aid Measures

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|---|---|
| **Inhalation:** | Remove affected personnel to an exposure-free environment. |
| **Skin and eye contact:** | Flush eyes with water. Wash skin with soap and water. |
| **Ingestion:** | Not applicable, not expected |
| **Indication of need for immediate medical attention and special treatment:** | Not applicable, note expected |

## Section 5 – Fire Fighting Measures

The materials in this product is not very combustible but may burn if exposed to high temperatures.

**Suitable extinguishing media:**
Use an extinguisher that is suitable for the surrounding fire.

**Combustion hazards:**
When burned, carbon/graphite releases carbon dioxide (and possibly carbon monoxide if there is not enough oxygen for complete combustion).

**Special fire-fighting procedures:**
Use protective clothing and breathing equipment appropriate to the surrounding fire.

**Unusual fire and explosion hazards:**
As is the case with any combustible dust, concentrations of airborne carbon/graphite dust can present a dust explosion hazard. Practice good housekeeping to prevent dust accumulations and prevent situations where substantial amounts of dust can become airborne.

**Flash point**: Not applicable **Flammable limits:** Not applicable

## Section 6 – Accidental Release Measures

Sweep or vacuum spilled material and place into sealable containers. Avoid creating and breathing airborne dust. Dispose in accordance with applicable waste disposal regulations.

## Section 7 – Handling and Storage

Follow the equipment manufacturer's direction about operation and ventilation of that equipment. Practice good housekeeping to avoid the accumulation of dust in the workplace. Avoid creating and breathing airborne dust. Practice good personal hygiene. As a good practice, wash hands before eating, drinking or smoking and do not store food, or eat or drink, in areas where chemicals are handled.

## Section 8 – Exposure Controls and Personal Protection

**Exposure limits and guidelines:**

| Material | OSHA PEL 8-Hr TWA | ACGIH TLV 8-Hr TWA |
|---|---|---|
| **Graphite** | 15 mg/m$^3$ (total)<br>5 mg/m$^3$ (respirable) | 2.0 mg/m$^3$ (respirable) |
| **Carbon** | 15 mg/m$^3$ (total)<br>5 mg/m$^3$ (respirable) | 10 mg/m$^3$ (total)<br>3 mg/m$^3$ (respirable) |
| **Copper** | 1 mg/m$^3$ (dust)<br>0.1 mg/m$^3$ (fume) | 1 mg/m$^3$ (dust)<br>0.1 mg/m$^3$ (fume) |
| **Rare Earth Compounds** | 15 mg/m$^3$ (total)<br>5 mg/m$^3$ (respirable) | 10 mg/m$^3$ (total)<br>3 mg/m$^3$ (respirable) |

Other jurisdictions may have different exposure limits and control guidelines. Users are advised to consult and comply with local regulations.

**Engineering controls:**
Use good housekeeping practices. Use general or local exhaust ventilation, if necessary, to reduce concentrations of airborne contaminants.

**Personal protective equipment:**
Use NIOSH-approved respiratory protective equipment if exposures exceed established limits.

**General hygiene considerations:**
As a good practice, wash hands before eating, drinking or smoking and do not store food, or eat or drink, in areas where chemicals are handled.

## Section 9 – Physical and Chemical Properties

| | | | |
|---|---|---|---|
| **Appearance:** | Black rod, may be copper plated | **Odor:** | No odor |
| **Odor threshold:** | Not applicable | **pH:** | Not applicable |
| **Melting point:** | Not applicable | **Boiling point:** | Not applicable |
| **Flash point:** | Not applicable | **Evaporation rate:** | Not applicable |
| **Flammability:** | Not applicable | **LEL/UEL:** | Not applicable |
| **Vapor pressure:** | Not applicable | **Vapor density:** | Not applicable |
| **Relative density:** | Not applicable | **Water solubility:** | Insoluble |
| **Partition coefficient (n-octanol/water):** | Not applicable | **Autoignition temperature** | Not applicable |
| **Decomposition temperature:** | Not applicable | **Viscosity:** | Not applicable |

## Section 10 – Stability and Reactivity

This material is stable and non-reactive.

## Section 11 – Toxicological Information

None of the materials in this product are listed as a carcinogen by the International Agency for Research on Cancer (IARC), US OSHA or the US Department of Health and Human Services National Toxicology Program (NTP).

“Rare earth” refers to a mixture of several similar elements. It is possible that toxicology and health effects may vary based on the relative proportions of the elements. The SDS provided by the supplier of our raw material indicates low toxicity and health effects.

Additional toxicological information is available through the U.S. National Institute for Occupational Safety and Health (NIOSH) Registry of Toxic Effects of Chemical Substances (RTECS). See website: http://www.cdc.gov/niosh/ipcsneng/nengrtec.html.

Graphite RTECS # MD9659600
Carbon RTECS # FF5250100

## Section 12 – Ecological Information

Carbon/graphite is relatively inert and would be expected to be of negligible consequence in the environment.

## Section 13 – Disposal Considerations

This product does not contain substances that could cause it to be hazardous waste, if disposed. Dispose in accordance with applicable waste disposal regulations.

## Section 14 – Transport Information

This product is not regulated as a hazardous material for transportation purposes by any known authority.

## Section 15 – Regulatory Information

All materials in these product grades are listed on the US EPA Toxic Substances Control Act (TSCA) inventory.

## Section 16 – Other Information

**HMIS Ratings**

| | |
|---|---|
| **Health** | **1*** |
| **Flammability** | **1** |
| **Physical Hazard** | **0** |

**Ratings are based on dust, if released from the product.**
*** indicates possible chronic health effects from continuing exposures**

**National ® product grades associated with this SDS:**
CMG, CMGA, ECL, ECR, ECV, ECX, ES1002, TC-172, TC-173, TC-174, TC-194, TS1900**,** TS2000, TS2061, TS2062

This SDS may also apply to other grades. Refer to the label on the product. The label will refer you to the SDS associated with that product.

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