



# Material Safety Data Sheet

## SECTION I PRODUCTS AND SUPPLIER

Generic Product Type	Electrical carbon products (e.g., carbon brushes and contacts) grades that do not contain metal additives
Company Name	Durst Industries Pty Ltd
Address	189 St Johns Road Glebe 2037 NSW Australia
Emergency Tel.	+61 2 9660 1755
Telephone/Fax Number	Tel: +61 2 9660 1755 Fax +61 2 9692 0251
Web Address	<a href="http://www.durst.com.au">www.durst.com.au</a>
Uses (and restrictions)	Customer applications of carbon products; typically carbon brushes for electric motors
Trade Names	See List of applicable grades in Section 16

## SECTION 2 HAZARD IDENTIFICATION

### Emergency Overview:

This product is a solid electrical component and represents no immediate hazards; however, dust created in shipping, handling and use may exhibit the hazards of the ingredients as described below, Avoid creating and breathing airborne dust.

### Short Term effects:

Dust from this material may irritate skin and eyes, primarily through mechanical abrasion. Inhalation of dust may cause nose and throat irritation. Avoid creating and breathing airborne dust. The decomposition of cured resin binders or impregnants caused by the heat of use in an electric motor can cause odours.

### Chronic Health effects:

Repeated or prolonged exposure to elevated concentrations of airborne dust can irritate the respiratory system, especially as an aggravation to a pre-existing condition. Long term inhalation of excessive amounts of dust can result in lung damage (pneumoconiosis). Avoid creating and breathing airborne dust.

### Physical Hazards:

Carbon/graphite dust is electrically conductive and dust accumulation on electrical equipment can cause short circuits. Dust from this product contains graphite and may create slippery conditions. Maintain good housekeeping.

## SECTION 3 HAZARDOUS COMPONENTS

Component	Concentration % by weight	CAS Registry No.
Graphite	0-90%	7782-42-5
Carbon	10-90%	7740-44-0
Silicon Carbide	0-10%	409-21-2
Cured Resins	0-10%	n/a

REV: NIL

MSDS: CARB-D

DATE: 20/06/11

AUTHORISED BY

PAGE: 1 of 5



**SECTION 4  
FIRST AID MEASURES**

First aid measures may be appropriate in cases of acute exposure to high concentrates of dust.

- Remove affected personnel to an exposure-free environment
- Flush contamination to eyes and skin with water
- Remove contaminated clothing

In response to chronic effects (see section 2) treat the immediate systems and seek medical advice.

**SECTION 5  
FIRE FIGHTING MEASURES**

This product is not very combustible, but may burn if exposed to high temperatures.

**Extinguishing Media:**

Use an extinguisher that is suitable for the surrounding fire.

**Special Fire Fighting Procedures:**

Use protective clothing and breathing equipment appropriate to the surrounding fire.

**Unusual Fire and Explosion Hazards:**

The small amounts of dust possibly generated from the handling and use of carbon products would not be expected to create an airborne dust explosion hazard. Practice good housekeeping to prevent dust accumulations.

**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**

Practice good housekeeping to avoid the accumulation of dust in the workplace. Avoid creating and breathing airborne dust. Practice good hygiene: 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:

<b>Material</b>	<b>OSHA PEL 8-Hr TWA</b>	<b>ACGIH TLV 8-Hr TWA</b>
<b>Graphite</b>	15 mg/m <sup>3</sup> (total) 5 mg/m <sup>3</sup> (respirable)	2.0 mg/m <sup>3</sup> (respirable)
<b>Carbon</b>	15 mg/m <sup>3</sup> (total) 5mg/m <sup>3</sup> (respirable)	10mg/m <sup>3</sup> (total) 3 mg/m <sup>3</sup> (respirable)
<b>Silicone Carbide</b>	15 mg/m <sup>3</sup> (total) 5 mg/m <sup>3</sup> (respirable)	10mg/m <sup>3</sup> (total) 3 mg/m <sup>3</sup> (respirable)

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

**Engineering controls:**

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

**Personal protective equipment:**

Use approved respiratory protective equipment if exposures exceed established limits.

**General hygiene considerations:**

Do not eat, drink or smoke when handling these products  
Do not store food or drink in areas where chemicals are handled  
Wash hands after handling these products.

**Environmental exposure controls:**

Use dust collection or HVAC filters to minimize release of airborne dust to outside air.

**SECTION 9  
PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Black Solid	<b>Odour:</b>	No Odour
<b>Melting Point:</b>	Not Applicable	<b>Boiling Point:</b>	Not Applicable
<b>Vapour Pressure:</b>	Not Applicable	<b>Percent Volatile:</b>	Not Applicable
<b>Vapour Density:</b>	Not Applicable	<b>Evaporation Rate:</b>	Not Applicable
<b>Water Solubility:</b>	Insoluble	<b>Specific Gravity:</b>	Various

**SECTION 10  
STABILITY AND REACTIVITY**

This material is generally stable and non-reactive.

REV: NIL

MSDS: CARB-D

DATE: 20/06/11

\_\_\_\_\_  
AUTHORISED BY

PAGE: 3 of 5



**SECTION 11  
TOXICOLOGICAL INFORMATION**

None of the materials in this product are listed as carcinogen by IARC, OSHA or NTP.

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: [www.cdc.gov/niosh/ipcsneng/nengrtec.html](http://www.cdc.gov/niosh/ipcsneng/nengrtec.html).

Graphite RTEC # MD9659600  
Carbon RTEC # FF5250100  
Silicon Carbide RTEC # VW0450000

**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 electrical component is typically part of an assembly that can be recycled for metal content. 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 or dangerous good for transportation purposes by any known authority.

**SECTION 15  
REGULATORY INFORMATION**

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

**SECTION 16  
OTHER INFORMATION**

**HMIS Ratings**

**Health**                1\*  
**Flammability**        1  
**Physical Hazard**    0

The \* indicates possible chronic health effects from continuing exposures

**National ® Grades associated with this MSDS**

**CARB-D100**

REV:     NIL

MSDS: CARB-D

DATE: 20/06/11

\_\_\_\_\_  
AUTHORISED BY

PAGE: 4 of 5



## MSDS MANUAL

This MSDS can be used for the base materials (block and pallets) used to fabricate finished carbon parts,

Reasonable care has been taken in the presentation of information contained in this Material Safety Data Sheet and the information is provided in good faith. Durst Industries Pty Ltd assumes no responsibility as to the accuracy of information drawn from other sources. No warranty, expressed or implied, is made. Information provided in this MSDS has been prepared by competent and appropriately qualified and trained persons according to the US OSHA Hazard Communication Standard and Canada Controlled Products Regulations (WHMIS).

The information contained in this Material Safety Data Sheet relates to the electrical carbon parts manufactured and sold by Durst Industries Pty Ltd and to the dust that may be generated from those parts in shipping, handling and use, It does not cover dust or odours that may be generated from other parts in an electric motor or assembly.

... End of MSDS...

REV: NIL

MSDS: CARB-D

DATE: 20/06/11

\_\_\_\_\_  
AUTHORISED BY

PAGE: 5 of 5