



MATERIAL SAFETY DATA SHEET

~~ARLIS - W/S MARK~~

P/N 126984, 151099

SECTION I - PRODUCT INFORMATION

Manufacturer's Name
National Electrical Carbon
Address
200 North Town Street, Fostoria, Ohio 44830

Emergency Telephone No.
(419)435-8182

Date Prepared: January, 1996

Product
Brushes, Carbon

Trade Names and Synonyms
NATIONAL® - Electrographite, Graphite,
Carbon-Graphite, All Non-metallic grades

SECTION 2 - HAZARDOUS INGREDIENTS

<u>Material</u>	<u>CAS</u>	<u>%</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Graphite	7782-42-5	>90	10 mg/m ³ 5 mg/m ³ (Respirable Fraction)	2.0 mg/m ³ (Respirable Fraction)

SECTION 3 - PHYSICAL DATA

Boiling Point (degrees F) - N/A
Vapor Density (Air = 1) - N/A
Specific Gravity (Water = 1) - Approx. 2
Evaporation Rate (Butyl Acetate = 1) - N/A

Vapor Pressure (mm Hg) - N/A
Solubility in Water - Negligible
Percent Volatile by Volume % - N/A
Appearance/Odor - Black blocks of varying sizes and shapes; most with hardware attached; no odor.

SECTION 4 - FIRE AND EXPLOSION DATA

Flash Point (Method Used) - N/A
Extinguishing Media - None, will not support combustion

Flammable Limits % by Volume - LEL-N/A UEL-N/A
Unusual Fire and Explosion Hazards - Material is typically in solid form and therefore is not combustible; dust from machining and usage wear may be combustible

Special Fire Fighting Procedures - Wear self-contained breathing apparatus, operating in the positive pressure mode, and full fire-fighting protective clothing when fighting fires.

SECTION 5 - HEALTH DATA

Primary Routes of Exposure	Inhalation? Yes	Skin? Yes	Ingestion? Unlikely	Eyes? Yes
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Effects of Overexposure - Graphite dust can be mildly irritating to the lungs and prolonged and repeated over exposure may lead to benign pneumoconiosis. Dust particles may cause mechanical irritation to the eyes and skin.

Carcinogenicity	NTP - No	IARC - No	OSHA - No
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N/A - Not Applicable **N/E - None Established**

NATIONAL ELECTRICAL CARBON

PRODUCT: Brushes, Carbon - NATIONAL® Grades, Electrographite, Graphite, Carbon-Graphite

SECTION 6 - EMERGENCY AND FIRST AID PROCEDURES

For overexposure to graphite particulate matter (dust):

Eyes - Flush with water for at least 15 minutes. Seek medical attention if irritation develops or persists.

Lungs - Remove to fresh air. Seek medical attention if breathing becomes difficult.

Skin - Wash affected area thoroughly with mild soap and water. Seek medical attention if irritation develops or persists.

SECTION 7 - REACTIVITY DATA

Stability - Stable **Conditions to Avoid** - N/A

Incompatibility (Materials to Avoid) - N/A

Hazardous Decomposition Products - None

Hazardous Polymerization - Will not occur

SECTION 8 - SPILL AND LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled - Graphite causes slippery conditions due to its lubricating characteristics. Carefully sweep up material and wash floor with soap and water. Avoid dust that may be generated during sweeping. Recycle or containerize for solid waste disposal.

Waste Disposal Method - Dispose according to local, state, and federal regulations.

SECTION 9 - SPECIAL PROTECTION INFORMATION

Respiratory Protection - NIOSH/MSHA approved respirator required if established exposure levels listed in SECTION II are exceeded.

Ventilation Requirements:

Local Exhaust - Yes, if dusts are generated **Special** - N/A **Mechanical (general)** - As necessary to minimize dust

Protective Gloves - Yes

Eye Protection - Safety glasses with side shields, goggles, or face shield

Other Protective Clothing or Equipment - Eye wash station

ALL CHEMICALS SHOULD BE HANDLED SO AS TO PREVENT EYE CONTACT AND EXCESSIVE OR REPEATED SKIN CONTACT. APPROPRIATE EYE AND SKIN PROTECTION SHOULD BE USED. INHALATION OF DUSTS AND VAPORS SHOULD BE AVOIDED.

SECTION 10 - SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing - Graphite dust is electrically conductive. Dust accumulations can cause short circuits. Maintain good housekeeping practices. Do not breath dust.

Other Precautions - None

N/A - Not Applicable **N/A** - None Established

NOTICE FROM NATIONAL ELECTRICAL CARBON

The information in this Material Safety Data Sheet (MSDS) relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. We believe that the information contained herein is current as of the date of the MSDS. Since the use of this information and these opinions and the conditions of use of the product are not within the control of National Electrical Carbon, it is the user's obligation to determine the conditions of safe use of the product.