



Micromeritics Instrument Corp. and Micromeritics Analytical Services

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Surface Area - Porosity - Density - Particle Size, Shape & Count - Catalytic Activity - Surface Energy - Analytical Services

MSDS Cover Sheet



INSTRUMENT CORPORATION
ONE MICROMERITICS DR.
NORCROSS, GA 30093-1877 U.S.A.

CARBON BLACK, EXTERNAL S.A.

						DWN BY	J. Pittman
						ENGR	J. Mocny
						ENGR SIG	P. Hendrix
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A	005/65000/10MSDS	X of 5

Micromeritics Material Safety Data Sheet

Title : CARBON BLACK, EXTERNAL S.A.
Date of Preparation : 06/16/04

MSDS No. : 005/65000/10MSDS
Revision : C

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Carbon Black

Chemical Formula: Not Applicable

CAS Number: Not Applicable

Other Designations: Not Applicable

General Use: Not Applicable

Supplier: Micromeritics Instrument Corp.
1 Micromeritics Dr.
Norcross, GA 30093-1877 USA

Contact: Human Resources
Phone: (770) 662-3620
Fax: (770) 662-3696

Manufacturer:

Micromeritics Instrument Corp., 1 Micromeritics Dr, Norcross, GA 30093-1877 USA, Phone: (770) 662-3678
Cabot Corporation, 75 State Street, Boston, MA 02109-1806 Phone (617)342-6023 (days),
(304)665-2442 (nights/weekends)

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	%
Carbon Black	1333-86-4	100.0

Trace Impurities:	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
	TWA	STEL	TWA	STEL	TWA	STEL	IDLH
Carbon Black	3.5 mg/m ³	none estab.	3.5 mg/m ³	none estab.	none estab.	none estab.	none estab.

Section 3 - Hazards Identification

☆☆☆☆☆ **Emergency Overview** ☆☆☆☆☆

HMIS
H 0
F 1
R 0
PPE†
†Sec. 8

Potential Health Effects

Primary Entry Routes: Inhalation

Target Organs: Not Applicable

Acute Effects

Inhalation: None expected. Temporary discomfort to the upper respiratory tract may occur due to inhalation of dust concentrations above the Threshold Limit Value (TLV).

Eye: Not Applicable

Skin: Not Applicable

Ingestion: Not Applicable

Carcinogenicity: Not Applicable

Medical Conditions Aggravated by Long-Term Exposure: Not Applicable

Chronic Effects:

Inhalation: Carbon black contains less than 0.1% of adsorbed polynuclear aromatic compounds (PNA). In non-adsorbed form, some PNA's have been found to be carcinogens in certain studies. No carcinogenic effect, however, has been found in humans due to exposure to carbon black. Carbon black is not considered a carcinogen by the International Agency for Research on Cancer (IARC), the Occupational Safety and Health Administration (OSHA), or the National Toxicology Program (NTP). Epidemiologic studies of workers in the carbon black producing industry in the U.S. and W. Europe show no significant adverse health effects due to occupational exposure to carbon black.

Some studies in USSR and E. Europe report respiratory diseases, including: bronchitis, pneumoconiosis, emphysema and rhinitis among some workers. Such studies are of questionable validity due to inadequate study design and methodology, lack of appropriate controls for cigarette smoking and other confounding factors, such as carbon monoxide, coal oil and petroleum vapors. Moreover, review of these studies indicates that the concentration of carbon black was substantially greater than OSHA recommended levels.

Chronic inflammation, lung fibrosis, and lung tumors have been found in preliminary studies in rats experimentally exposed, for long periods of time, to excessive concentrations of carbon black and other insoluble dust particles which overwhelm the lung clearance mechanisms. The researchers who conducted these tests believe that these conditions most likely result from the massive accumulation of small dust particles in the lung, the "dust overload phenomenon", rather than from a specific chemical effect of the dust particles. Such effects occur only when the lungs are overloaded with an excess of small particles. They are unlikely to result from workplace exposures to carbon black at or below the TLV. Human studies have not found that workplace exposures to carbon black at or below the TLV cause these effects.

Section 4 - First Aid Measures

Inhalation: move victim to fresh air.

Eye Contact: Not Applicable

Skin Contact: Acute: None significant. See Section 8 - Hygienic Practices.
Chronic: None significant.

Ingestion: Not Applicable

Note to Physicians: Not Applicable

Special Precautions/Procedures: Not Applicable

Section 5 - Fire-Fighting Measures

Flash Point: > 500°C

Flash Point Method: Closed cup

Burning Rate: Not Applicable

Autoignition Temperature: Not Applicable

LEL: Not Applicable

UEL: Not Applicable

Flammability Classification: Not Applicable

Extinguishing Media: Copious water

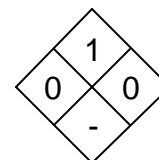
Unusual Fire or Explosion Hazards: Carbon monoxide and carbon dioxide are products of combustion. Use appropriate respirator for protection against possible exposure to CO or CO₂. It may not be obvious that the carbon black is burning unless the material is stirred and sparks are apparent.

Hazardous Combustion Products: Not Applicable

Fire-Fighting Instructions: Normal fog or nozzle jet application and/or exclusion of air.

Fire-Fighting Equipment: Not Applicable

NFPA



Section 6 - Accidental Release Measures

Spill /Leak Procedures: Carbon black is not a hazardous waste under US Federal RCRA Regulation. Wear NIOSH approved Dust Protection Respirator, if needed. Spills should be removed by vacuuming, or spraying with water and sweeping mixture into a suitable container.

Small Spills: Not Applicable

Large Spills

Containment: Not Applicable

Cleanup: Not Applicable

Regulatory Requirements: Not Applicable

Section 7 - Handling and Storage

Handling Precautions: Before entering closed vessels and confined spaces, test for possible elevated levels of CO. Wear appropriate respirator to guard against possible exposure to CO, CO₂, or lack of adequate oxygen supply.

Storage Requirements: Not Applicable

Regulatory Requirements: Not Applicable

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Not Applicable

Ventilation: Sufficient ventilation, in volume and pattern, to maintain exposure below TLV.

Administrative Controls: Not Applicable

Respiratory Protection: None in normal handling. Wear NIOSH approved respirator for nuisance dust when dust levels exceed TLV.

Protective Clothing/Equipment: Gloves: None required. Eye Protection: None required.

Safety Stations: Not Applicable

Contaminated Equipment: Not Applicable

Comments: Not Applicable

Hygienic Practices: Wash exposed skin for hygienic purposes. Most skin irritation attributed to carbon black has been found to be due to the soap used for washup. A mild unscented soap should be used.

Section 9 - Physical and Chemical Properties

Physical State: Not Applicable	Water Solubility: Insoluble
Appearance and Odor: Amorphous black solid, no odor	Other Solubilities: Not Applicable
Odor Threshold: Not Applicable	Boiling Point: Not Applicable
Vapor Pressure: Not Applicable	Freezing/Melting Point: Not Applicable
Vapor Density (Air=1): Not Applicable	Viscosity: Not Applicable
Formula Weight: Not Applicable	Refractive Index: Not Applicable
Density: Not Applicable	Surface Tension: Not Applicable
Specific Gravity (H₂O=1): 1.7 - 1.9	% Volatile: Not Applicable
pH: Not Applicable	Evaporation Rate: Not Applicable

Section 10 - Stability and Reactivity

Stability: Stable
Polymerization: Not Applicable
Chemical Incompatibilities: Not Applicable
Conditions to Avoid: Excessive heat or flame. May react upon contact with strong oxidizers such as chlorates, bromates and nitrates.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide and small amounts of sulfur containing gases when burning.

Section 11 - Toxicological Information

Toxicity Data:

Eye Effects: Not Applicable	Acute Inhalation Effects: Not Applicable
Skin Effects: Not Applicable	Acute Oral Effects: Not Applicable
	Chronic Effects: Not Applicable
	Carcinogenicity: Not Applicable
	Mutagenicity: Not Applicable
	Teratogenicity: Not Applicable

Section 12 - Ecological Information

Ecotoxicity: Not Applicable
Environmental Fate: Not Applicable
Environmental Degradation: Not Applicable
Soil Absorption/Mobility: Not Applicable

Section 13 - Disposal Considerations

Disposal: Burn or bury in accordance with Federal, State and local laws and regulations.
Disposal Regulatory Requirements: Not Applicable
Container Cleaning and Disposal: Not Applicable

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Not Applicable

Shipping Symbols: Not Applicable

Hazard Class: Not Applicable

ID No.: Not Applicable

Packing Group: Not Applicable

Label: Not Applicable

Special Provisions (172.102):

Not Applicable

Packaging Authorizations

a) Exceptions: Not Applicable

b) Non-bulk Packaging: Not Applicable

c) Bulk Packaging: Not Applicable

Quantity Limitations

a) Passenger, Aircraft, or Railcar: Not Applicable

b) Cargo Aircraft Only: Not Applicable

Vessel Stowage Requirements

a) Vessel Stowage: Not Applicable

b) Other: Not Applicable

Section 15 - Regulatory Information

EPA Regulations: Not Applicable

OSHA Regulations: Not Applicable

State Regulations: Not Applicable

Section 16 - Other Information

Prepared By: ADG

Revision Notes: Not Applicable

Additional Hazard Rating Systems: Not Applicable

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