

SAFETY DATA SHEET: Conductive Acetylene Black Nano powder
Version: 1.2 **Revision Date: 04/03/2020**

Section 1: Identification

1.1) Product identifier:

Product Name : Conductive Acetylene Black Nanopowder
Synonyms : Carbon, mesoporous, Graphite nanoparticles
Product Number : BR0133
CAS Number : 1333-86-4

1.2) Company information:

Address: MSE Supplies, LLC
4400 E Broadway Blvd, Suite 600
Tucson, AZ 85711, USA
Telephone: +1 520-789-6673
Email: info@mse Supplies.com
Emergency Telephone : +1-703-527-3887

1.3) Relevant identified uses of the substance or mixture and uses advised against:

Identifies uses: Laboratory chemicals, Synthesis of substances

Section 2: Hazard(s) Identification

2.1) Classification of the substance or mixture GHS classification in accordance with 29 CFR 1910 (OSHA HCS):

Carcinogenicity (Category 2), H351

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2) GHS Label elements, including precautionary statements:

Pictograms:



Signal Word: Warning

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Hazard Statement(s)

H351 Suspected of causing cancer.

Precautionary Statement(s)

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

2.3) Hazards not otherwise classified (HNOC) or covered by GHS:

combustible dust

Section 3: Composition/Information on Ingredients

3.1) Substances:

Formula: C
Molecular Weight: 12.01 g/mol
CAS Number: 1333-86-4
EC Number: 215-609-9

Component	Classification	Concentration
Carbon black	Carc. 2; H351	<=100%

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4: First-Aid Measures

4.1) Description of first aid measures:

General advice

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Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2) Most important symptoms and effects, both acute and delayed:

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3) Indication of any immediate medical attention and special treatment needed:

No data available

Section 5: Fire-Fighting Measures

5.1) Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2) Special hazards arising from the substance or mixture:

Carbon oxides

5.3) Advise for firefighters:

Wear self-contained breathing apparatus for firefighting if necessary.

5.4) Further information:

No data available

Section 6: Accidental Release Measures

6.1) Personal precautions, protective equipment, and emergency procedures:

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Avoid dust formation. Avoid breathing vapors, mist or gas.

For personal protection see section 8.

6.2) Environmental precautions:

Do not let product enter drains.

6.3) Methods and materials for containment and cleaning up:

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4) Reference to other sections:

For disposal see section 13.

Section 7: Handling and Storage

7.1) Precautions for safe handling:

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2) Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): 13: Non Combustible Solids

7.3) Specific end use(s):

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8: Exposure Controls/Personal Protection

8.1) Control parameters:

Components with workplace control parameters

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Component	CAS-Number	Value	Control Parameters	Basis
Carbon Black	7782-42-5	TWA	3 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Bronchitis Confirmed animal carcinogen with unknown relevance to humans		
		TWA	3.5 mg/m ³	USA. NIOSH Recommended Exposure Limits
		TWA	3.5 mg/m ³	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		PEL	3.5 mg/m ³	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		TWA	0.1 mg/m ³	USA. NIOSH Recommended Exposure Limits
		Potential Occupational Carcinogen Carbon black in presence of polycyclic aromatic hydrocarbons (PAHs) See Appendix C See Appendix A		

8.2) Exposure controls:

Appropriate engineering controls:

General industrial hygiene practice.

Personal protective equipment

Eye/face protection:

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in

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accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection:

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection:

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure:

Do not let product enter drains.

Section 9: Physical and Chemical Properties

9.2) Information on basic physical and chemical properties:

a) Appearance (physical state, color, etc.)	Black powder
b) Upper/lower flammability or explosive limits	No data available
c) Odor	No data available
d) Odor threshold	No data available
e) Vapor pressure	No data available
f) Vapor density	No data available
g) pH	4.0 - 11.0 at 50 g/l at 20 °C (68 °F)
h) Density	1.828 g/mL at 25 °C (77 °F)
i) Melting point/freezing point	3,654 - 3,697 °C
j) Solubility(ies)	No data available
k) Initial boiling point and boiling range	4,827 °C 8,721 °F

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l) Flash point	No data available
m) Evaporation rate	No data available
n) Flammability (solid, gas)	No data available
o) Partition coefficient: n-octanol/water	No data available
q) Auto-ignition temperature	>315 °C (> 599 °F)
r) Decomposition temperature	No data available
s) Viscosity	No data available
t) Explosive properties	No data available
u) Oxidizing properties	No data available

9.2) Other Safety information:

No data available

Section 10: Stability and Reactivity

10.1) Reactivity:

No data available

10.2) Chemical Stability:

Stable under recommended storage conditions.

10.3) Possibility of hazardous reactions:

No data available

10.4) Conditions to avoid:

Do not heat over: 290°C

10.5) Incompatible materials:

Strong oxidizing agents

10.6) Hazardous decomposition products:

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

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In the event of a fire: see section 5.

Section 11: Toxicological Information

11.1) Information on toxicological effects:

Acute toxicity:

LD50 Oral - Rat - female - > 2,000 mg/kg
(OECD Test Guideline 423)
LC50 Inhalation - Rat - male and female - 4 h - 2,000 mg/m³
(OECD Test Guideline 403)
Dermal: No data available
No data available

Skin corrosion/irritation:

Skin - Rabbit
Result: No skin irritation
(OECD Test Guideline 404)

Serious eye damage/ eye irritation:

Eyes - Rabbit
Result: No eye irritation
(OECD Test Guideline 405)

Respiratory or skin sensitization:

Mouse
Did not cause sensitization on laboratory animals.
(OECD Test Guideline 429)

Germ cell mutagenicity:

No data available
Ames test
S. typhimurium
Result: negative

Carcinogenicity:

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Carbon black).

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NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity:

No data available

Specific target organ toxicity – single exposure:

No data available

Specific target organ toxicity – repeated exposure:

No data available

Aspiration hazard:

No data available

Additional information:

Repeated dose toxicity - Rat - male - Feed - No observed adverse effect level - 813 mg/kg RTECS: MD9659600

Section 12: Ecological Information

12.1) Toxicity:

Toxicity to fish

semi-static test LC50 - Danio rerio (zebra fish) - > 100 mg/l - 96 h (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202)

Toxicity to algae

static test EC50 - Pseudokirchneriella subcapitata - > 100 mg/l - 72 h (OECD Test Guideline 201)

12.2) Persistence and degradability:

No data available

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12.3) Bioaccumulative potential:

No data available

12.4) Mobility in soil:

No data available

12.5) Results of PBT and vPvB assessment:

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6) Other adverse effects:

No data available

Section 13: Disposal Considerations

13.1) Waste treatment methods:

Product:

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging:

Dispose of as unused product.

Section 14: Transport Information

DOT (US):

Not dangerous goods

IMDG:

Not dangerous goods

IATA:

Not dangerous goods

Section 15: Regulatory Information



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SARA 302 Components:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards:

Chronic Health Hazard

Massachusetts Right To Know Components:

Carbon Black	CAS-#	Revision Date
	1333-86-4	1993-02-16

Pennsylvania Right To Know Components:

Carbon Black	CAS-#	Revision Date
	1333-86-4	1993-02-16

New Jersey Right To Know Components:

Carbon Black	CAS-#	Revision Date
	1333-86-4	1993-02-16

California Prop. 65 Components:

WARNING! This product contains a chemical known to the State of California to cause cancer. Carbon black.

CAS-#	Revision Date
1333-86-4	2007-09-28

Section 16: Other Information

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. MSE Supplies LLC and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

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