



## MATERIAL SAFETY DATA SHEET

[www.msesupplies.com](http://www.msesupplies.com)  
4400 E Broadway Blvd, Suite 600  
Tucson AZ 85711  
Tel: 5207896673  
Email: [info@msesupplies.com](mailto:info@msesupplies.com)

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Mesocarbon Microbeads (MCMB) powder  
**MANUFACTURER:** MSE Supplies LLC  
**DIVISION:** MSE Supplies Battery Division  
**ADDRESS:** MSE Supplies LLC, 4400 E Broadway Blvd, Suite 600, Tucson AZ 85711 USA  
**PHONE:** +1-520-789-6673  
**EMAIL:** [Info@msesupplies.com](mailto:info@msesupplies.com)  
**Non-emergency assistance:** 1-888-525-3070  
**CHEMTREC (24HR Emergency Telephone), call:** 1-800-424-9300  
**Issue Date:** 09/12/2017

### SECTION 2: INGREDIENTS

Substances  
Formula: C  
Molecular weight: 12.01 g/mol  
CAS-No.: 7782-42-5  
EC-No.: 231-955-3

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Powder  
**Odor, Color, Grade:** odorless, black powder  
**General Physical Form:** Solid

**Immediate health, physical, and environmental hazards:** This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

#### 3.2 POTENTIAL HEALTH EFFECTS

**Eye Contact:**

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

**Skin Contact:**

Mechanical Skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching.

**Inhalation:**

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

**Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

### SECTION 4: FIRST AID MEASURES



## MATERIAL SAFETY DATA SHEET

[www.ms\\_supplies.com](http://www.ms_supplies.com)  
4400 E Broadway Blvd, Suite 600  
Tucson AZ 85711  
Tel: 5207896673  
Email: [info@ms\\_supplies.com](mailto:info@ms_supplies.com)

### 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

**Skin Contact:** Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband

## SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

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

Special hazards arising from the substance or mixture

Carbon oxides

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

#### Small Spill

Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: Neutralize the residue with a dilute solution of acetic acid. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

#### Large Spill

Use a shovel to put the material into a convenient waste disposal container. Neutralize the residue with a dilute solution of acetic acid. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

### 6.2. Environmental precautions

Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

## SECTION 7: HANDLING AND STORAGE

### 7.1 HANDLING

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.



## 7.2 STORAGE

Store the material in a tightly closed container, and place in a dry and well-ventilated place. Avoid moisture.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### 8.2.1 Eye/Face Protection

Avoid eye contact.

The following eye protection(s) are recommended: Safety Glasses with side shields

#### 8.2.2 Skin Protection

Avoid skin contact. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

#### 8.2.3 Respiratory Protection

Dust respirator. Be sure to use an approved/certified respirator or equivalent.

#### 8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Do not ingest.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Specific Physical Form:</b>	Powder
<b>Odor, Color, Grade:</b>	odorless, black powder
<b>General Physical Form:</b>	Solid
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Flash Point</b>	No flash point
<b>Flammable Limits(LEL)</b>	<i>Not Applicable</i>
<b>Flammable Limits(UEL)</b>	<i>Not Applicable</i>
<b>Boiling Point</b>	<i>Not Applicable</i>
<b>Vapor Density</b>	<i>Not Applicable</i>
<b>Vapor Pressure</b>	<i>Not Applicable</i>
<b>Specific Gravity</b>	$\geq 1.0$ [Ref Std: WATER=1]
<b>pH</b>	N/A
<b>Melting point</b>	3652~3697°C
<b>Solubility in Water</b>	Slightly soluble
<b>rate</b>	<i>Not Applicable</i>
<b>Volatile Organic Compounds</b>	<i>Not Applicable</i>
<b>Kow - Oct/Water partition coef</b>	<i>No Data Available</i>
<b>Percent volatile</b>	<i>No Data Available</i>
<b>VOC Less H2O &amp; Exempt Solvents</b>	<i>Not Applicable</i>
<b>Viscosity</b>	<i>Not Applicable</i>



## MATERIAL SAFETY DATA SHEET

[www.msesupplies.com](http://www.msesupplies.com)  
4400 E Broadway Blvd, Suite 600  
Tucson AZ 85711  
Tel: 5207896673  
Email: [info@msesupplies.com](mailto:info@msesupplies.com)

### SECTION 10: STABILITY AND REACTIVITY

**Stability:** No data available.

**Material**

**Is and Conditions to Avoid:** No data available

**Conditions to avoid:** No data available

**Materials to avoid:** No data available

**Hazardous Polymerization:** Hazardous polymerization will not occur.

### Hazardous Decomposition or By-Products

Substance  
None

Condition  
N/A

### SECTION 11: TOXICOLOGICAL INFORMATION

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/m<sup>3</sup>

(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 sensitisation

- Mouse

Did not cause sensitisation on laboratory animals.

(OECD Test Guideline 429)

Germ cell mutagenicity

in vitro assay

S. typhimurium

Result: negative

Carcinogenicity

IARC:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.



## MATERIAL SAFETY DATA SHEET

[www.msesupplies.com](http://www.msesupplies.com)  
4400 E Broadway Blvd, Suite 600  
Tucson AZ 85711  
Tel: 5207896673  
Email: [info@msesupplies.com](mailto:info@msesupplies.com)

### ACGIH:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

### 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 identified as a carcinogen or potential carcinogen by OSHA.

### Reproductive toxicity

No data available

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

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## SECTION 12: ECOLOGICAL INFORMATION

### 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) Persistence and degradability

No data available

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Results of PBT and vPvB assessment

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

#### Other adverse effects

No data available



## MATERIAL SAFETY DATA SHEET

[www.msesupplies.com](http://www.msesupplies.com)  
4400 E Broadway Blvd, Suite 600  
Tucson AZ 85711  
Tel: 5207896673  
Email: [info@msesupplies.com](mailto:info@msesupplies.com)

### SECTION 13: DISPOSAL CONSIDERATIONS

Waste must be disposed of in accordance with federal, state and local environmental control regulations

**EPA Hazardous Waste Number (RCRA):** Not regulated

### SECTION 14: TRANSPORT INFORMATION

**DOT Classification:** Not a DOT controlled material (United States).

**Identification:** Not applicable.

**Special Provisions for Transport:** Not applicable.

### SECTION 15: REGULATORY INFORMATION

**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**

No SARA Hazards

**Massachusetts/Pennsylvania/New Jersey Right To Know Components**

Graphite

CAS-No.: 7782-42-5

Revision Date: 1989-08-11

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### SECTION 16: OTHER INFORMATION

**NFPA Hazard Classification**

**Health: 1 Flammability: 1 Reactivity: 0 Special Hazards: None**

**Disclaimer:** MSE Supplies LLC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. This document has been prepared using data from sources considered to be technically reliable and the information is believed to be correct. MSE Supplies LLC makes no warranties, expressed or implied, as to the accuracy of the information contained herein. MSE Supplies cannot anticipate all conditions under which this information and its products



## MATERIAL SAFETY DATA SHEET

[www.msesupplies.com](http://www.msesupplies.com)  
4400 E Broadway Blvd, Suite 600  
Tucson AZ 85711  
Tel: 5207896673  
Email: [info@msesupplies.com](mailto:info@msesupplies.com)

---

may be used and the actual conditions of use are beyond its control. The user is responsible to evaluate all available information when using this product for any particular use and to comply with all Federal, State, Provincial and Local laws, statutes and regulations.