

## SECTION 1: PRODUCT & COMPANY IDENTIFICATION

### 1.1 Product Identifiers

Product Name: NANOMYTE® BE-10C

Product Description: Carbon-coated Lithium Titanate (Li<sub>4</sub>Ti<sub>5</sub>O<sub>12</sub>)

### 1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Identified Uses: Laboratory chemicals; synthesis of substances; R&D

### 1.3 Details of the Supplier of the Safety Data Sheet

Company: NEI Corporation

Address: 400 Apgar Drive, Unit E – Somerset, NJ 08873 – United States of America

Phone: +1 (732) 868-3141

Fax: +1 (732) 868-3143

Email: productinfo@neicorporation.com

### 1.4 Emergency Telephone Number

Manufacturer: +1 (732) 868-3142 (9am to 6pm EST / UTC -0500)

U.S. Poison Control Center: +1-800-222-1222

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the Substance or Mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Not a hazardous substance or mixture

### 2.2 GHS Label elements, including precautionary statements

#### Hazard Statement(s):

Not a hazardous substance or mixture

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

None

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 Substances

Component Name	Synonyms	Formula	CAS #	Concentration
Lithium Titanate	LTO, Spinel	Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub>	12031-95-7	> 97%
Carbon coating	n/a	C	1333-86-4	< 3%

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of First Aid Measures

#### General Advice:

Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

#### After Inhalation:

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

#### After Skin Contact:

Wash off with soap and plenty of water.

#### After Eye Contact:

Flush eyes with water as a precaution.

#### After Swallowing:

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 11)

#### 4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

No data available

### SECTION 5: FIREFIGHTING MEASURES

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#### 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

Titanium/titanium oxides, Lithium oxides, carbon oxides; combustible

#### 5.3 Advice for Firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Other Information

No Data Available

### SECTION 6: ACCIDENTAL RELEASE MEASURES

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#### 6.1 Personal Precautions, Protective Equipment, and Emergency Procedures

Avoid dust formation. Avoid breathing vapors, mist or gas. For personal protection see section 8.

#### 6.2 Environmental Precautions

No special environmental precautions required.

#### 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

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#### 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. Keep away from moisture.  
Storage class (TRGS 510): 11: Combustible Solids

#### 7.3 Specific End Uses

A part from the uses mentioned in section 1.2 no other specific uses are stipulated.

### SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

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#### 8.1 Control Parameters

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure Controls

##### Appropriate Engineering Controls

Handle in accordance with good industrial hygiene and safety 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 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**

No special environmental precautions required.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on Basic Physical and Chemical Properties**

Physical State:	Solid (powder)
Color:	Grey
Odor:	No data available
pH (20 °C):	No data available
Melting Point / Range:	No data available
Boiling Point / Range:	No Data Available
Flash Point:	No Data Available
Evaporation Rate:	No Data Available
Flammability:	No data available
Upper Explosion Limit:	No Data Available
Lower Explosion Limit:	No Data Available
Vapor Pressure:	No Data Available
Vapor Density:	No Data Available
Relative Density:	No Data Available
Water Solubility:	No Data Available
Partition Coefficient:	No Data Available
Auto-ignition Temperature:	No Data Available
Decomposition Temperature:	No Data Available
Viscosity:	No Data Available
Explosive Properties:	No Data Available
Oxidizing Properties:	No Data Available

**9.2 Other Safety Information**

None

**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**

Moisture

### 10.5 Incompatible Materials

Strong oxidizing agents

### 10.6 Hazardous Decomposition Products

Other Decomposition Products: No Data Available; in the event of fire, see Section 5.

## SECTION 11: TOXICOLOGICAL INFORMATION

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### 11.1 Information on Toxicological Effects

#### Acute Toxicity

Oral LD50: No Data Available

Inhalation LC50: No Data Available

Dermal LD50: No Data Available

Other Information: No Data Available

#### Skin corrosion/irritation

No Data Available

#### Serious eye damage/eye irritation

No Data Available

#### Respiratory or skin sensitization

No Data Available

#### Germ cell mutagenicity

No Data Available

#### Carcinogenicity

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

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

#### Teratogenicity

No Data Available

#### Specific target organ toxicity - single exposure (Globally Harmonized System)

No Data Available

#### Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No Data Available

#### Aspiration hazard

No Data Available

#### Additional Information

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

## SECTION 12: ECOLOGICAL INFORMATION

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### 12.1 Toxicity

No Data Available

**12.2 Persistence and Degradability**

No Data Available

**12.3 Bioaccumulative Potential**

No Data Available

**12.4 Mobility in Soil**

No Data Available

**12.5 PBT and vPvB Assessment**

No Data Available

**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. Contact a licensed professional waste disposal service to dispose of this material.

**13.2 Waste Treatment Methods – Contaminated Packaging**

Dispose of as unused product, clean residue from packaging, & dispose of properly.

**SECTION 14: TRANSPORT INFORMATION**

**14.1 Department of Transportation (DOT - US)**

Not dangerous goods

**14.2 International Maritime Dangerous Goods (IMDG)**

Not dangerous goods

**14.3 International Air Transport Association (IATA)**

Not dangerous goods

**14.4 Additional Transport Information**

**HS Code:** 2825.90

**Schedule B:** 2825.90.9000

**SECTION 15: REGULATORY INFORMATION**

**15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture**

**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**

Acute Health Hazard

**Right to Know Components**

<u>Component</u>	<u>CAS #</u>	<u>States</u>
Lithium Titanate	12031-95-7	PA, NJ
Carbon	7440-44-0	PA, NJ

**CALIFORNIA PROPOSITION 65**

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

**15.2 Chemical Safety Assessment**

A chemical safety assessment was not carried out for this product.

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**SECTION 16: OTHER INFORMATION**

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**REACH Number**

A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

**Further Information**

NEI has attempted to provide current and accurate information to the best of its knowledge. NEI makes no representations regarding the accuracy or completeness of the information and assumes no liability for any loss, damage, injury of any kind which may result from or arise out of the use of or reliance on the information by any person. Employers should use this information only as a supplement to other information gathered by them and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**- END OF SDS -**