

## SECTION 1: PRODUCT & COMPANY IDENTIFICATION

### 1.1 Product Identifiers

NEI Product ID: CBP-60  
Product Description: Lithium Iron Phosphate powder  
CAS Number: 15365-14-7

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

Identified Uses: Cathode material for lithium-ion batteries

### 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](mailto: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

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 #	Weight %
Lithium Iron Phosphate	LFP	LiFePO <sub>4</sub>	15365-14-7	100%
<b>Hazard Classifications:</b> None				

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of First Aid Measures

#### General Advice:

Consult a physician if irritation occurs or if feeling unwell after exposure. Show this safety data sheet to the doctor in attendance.

#### After Inhalation:

If inhaled, move the 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 section 11.

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

No Data Available

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## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Unsuitable Extinguishing Media

No limitations of extinguishing agents are given for this material.

### 5.2 Special Hazards Arising from the Substance or Mixture

Oxides of Phosphorus, Lithium Oxides, Iron Oxides

### 5.3 Advice for Firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Other Information

No Data Available

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Avoid inhalation of dusts. Evacuate dangerous area, observe emergency procedures, consult an expert.

### 6.2 Environmental Precautions

Do not let product enter drains.

### 6.3 Methods and Materials for Containment and Cleaning Up

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 6.4 Reference to Other Sections

For safe handling, see Section 7; for personal protection, see Section 8; for disposal, see Section 13.

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## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for Safe Handling

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.

### 7.3 Specific End Uses

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

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## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control Parameters

#### Components with workplace 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. Change any contaminated clothing and wash hands after working with substance.

#### 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.

**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.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

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

Appearance:	Dark gray, solid powder
Odor:	No Data Available
Odor Threshold:	No Data Available
pH:	No Data Available
Melting Point / Range:	> 300 °C (572 °F)
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
Auto-ignition Temperature:	No Data Available
Decomposition Temperature:	No Data Available
Viscosity:	No Data Available

**9.2 Other Safety Information**

None

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**SECTION 10: STABILITY AND REACTIVITY**

**10.1 Reactivity**

No Data Available

**10.2 Chemical Stability**

Stable under ambient conditions (room temperature).

**10.3 Possibility of Hazardous Reactions**

No Data Available

**10.4 Conditions to Avoid**

No Data Available

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CBP-60: Lithium Iron Phosphate (LiFePO<sub>4</sub>) powder

## 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

### 11.1 Information on Toxicological Effects

#### Acute Toxicity

Component	Oral LD50	Dermal LD50	Inhalation LC50
Lithium Iron Phosphate	> 2,000 mg/kg (rat, female)	> 2,000 mg/kg (rat, male & female)	3.2 mg/l - dust/mist (rat, 4hr)

#### Skin corrosion/irritation

No skin irritation (rabbit, 4 hours)

#### Serious eye damage/eye irritation

No eye irritation (rabbit, 72 hours)

#### Respiratory or skin sensitization

Negative (Local lymph node assay (LLNA) – Mouse)

#### Germ cell mutagenicity

No Data Available

#### Carcinogenicity

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, NTP, or 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

RTECS: Not available

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

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

Component	Algae (OECD 201)	Freshwater Fish (OECD 203)	Daphnia (OECD 202)
Lithium Iron Phosphate	24 mg/l – 72 hours Pseudokirchneriella subcapitata	28 mg/l – 96 hours Cyprinus carpio (Carp)	28 mg/l – 48 hours Water Flea

### 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 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

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste.

### 13.2 Waste Treatment Methods – Contaminated Packaging

Handle uncleaned containers like the product itself.

## 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

Not classified as dangerous in the meaning of transport regulations.

**HS Code:** 2842.90 | **Schedule B:** 2842.90.9000

## 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

No SARA hazards

#### Right to Know Components

<u>Component</u>	<u>CAS #</u>	<u>List Citations</u>
Lithium Iron Phosphate	15365-14-7	PA, NJ Right to Know

#### 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.

#### Toxic Substances Control Act (TSCA) Chemical Substance Inventory

**Components:** Phosphoric acid, iron (2+) lithium salt (1:1:1) (CAS #15365-14-7)

### 15.2 Chemical Safety Assessment

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

### SECTION 16: OTHER INFORMATION

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#### 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 MSDS -**