

# **Material Safety Data Sheet**

### www.electrodesandmore.com

Version 1.1, Revision Date: June, 2013

#### **1. PRODUCT AND COMPANY IDENTIFICATION**

Product name	:Lithium iron phosphate
Part No	: BLFP-XXX
Brand	: Electrodesandmore
Supplier	: Battery Consulting
	4020 Christopher way
	Plano TX 75024
	USA
Telephone	: +1 877-394-3941
Fax	: +1 208-955-4890
Emergency Phone # (For both supplier and	
Manufacturer)	
	: +1 972-636-1722
Preparation Information: Battery Consulting Product Safety -	: +1 877-394-3941

#### 2. HAZARDS IDENTIFICATION

#### **Emergency Overview**

#### **OSHA Hazards**

No known OSHA hazards Not a dangerous substance or mixture according to the Globally Harmonised System(GHS)

HMIS Classification Health hazard Flammability	: 0 : 0
Physical hazards	: 0
NFPA Rating Health hazard Fire Reactivity Hazard	: 0 : 0 : 0
Potential Health Effects Inhalation Skin Eyes Ingestion	May be harmful if inhaled. May cause respiratory tract irritation. May be harmful if absorbed through skin. May cause skin irritation. May cause eye irritation. May be harmful if swallowed.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

: Ferrous lithium phosphate
Iron lithium phosphate
Triphylite
LFP
: LiFePO4



#### 4. FIRST AID MEASURES

#### 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.

#### 5. FIREFIGHTING MEASURES

#### Conditions of flammability

Not flammable or combustible.

#### Suitable extinguishing media

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

#### Special protective equipment for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

#### Hazardous combustion products

Hazardous decomposition products formed under fire conditions. Oxides of phosphorous, Lithium Oxides, Iron Oxides

#### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Avoid dust formation. Avoid breathing vapors, mist or gas

#### Environmental precautions

No special environmental precautions required.

# Methods and materials for containment and cleaning up

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

#### 7. HANDLING AND STORAGE

**Precautions for safe handling** Provide appropriate exhaust ventilation at places where dust is formed.

#### **Conditions for safe storage** Keep container tightly closed in a dry and well-ventilated place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION



Contains no substances with occupational exposure limit values.

#### Personal protective equipment

#### **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).

#### Hand 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.

#### Eye protection

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

#### Skin and body protection

Complete 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.

#### **Hygiene measures**

General industrial hygiene practice.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b> Form Color	: Powder : no data available
<b>Safety data</b> pH Melting point/freezing point	No data available >300° C(>572°F)
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Auto ignition Temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapor pressure	no data available
Density	no data available
Water solubility	no data available



Partition coefficient: n-octanol/water	no data available
Relative vapor Density	no data available
Odor	no data available
Odor Threshold	no data available
Evaporation rates	no data available

#### **10. STABILITY AND REACTIVITY**

#### Chemical stability

Stable under recommended storage conditions.

#### Possibility of hazardous reactions No data available

Conditions to avoid No Data Available

Materials to avoid Strong oxidizing agents.

## Hazardous decomposition products

Other decomposition products- no data available Hazardous decomposition products formed under fire conditions – Oxides of phosphorous, Lithium Oxides, Iron Oxides

#### **11. TOXICOLOGICAL INFORMATION**

#### Acute toxicity

Oral LD50		No data available
Inhalation LC50		No data available
Dermal LD50		No data available
Other information on	acute toxicity	No data available
Skin corrosion/irritati	on	No data available
Serious eye damage/e	eye irritation	No data available
Respiratory or skin se	ensitization	No data available
Germ cell mutagenici	ty	No data available
Carcinogenicity		
IARC:	No component	of this product present

IARC:No component of this product present at levels greater than or equal to 0.1% is identified as<br/>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<br/>carcinogen or potential carcinogen by ACGIH.



NTP: OSHA:	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. 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 t	oxicity - repeated exposu	re (Globally Harmonized System)	no data available
Aspiration hazard	no data available		
Potential health effect	;		
Inhalation Ingestion Skin Eyes	May be harmful if inhaled. May cause respiratory tract irritation. May be harmful if swallowed. May be harmful if absorbed through skin. May cause skin irritation. May cause eye irritation.		
Signs and Symptoms To the best of our know		al, and toxicological properties have r	not been thoroughly investigated.
Synergistic effects	no data a	vailable	
Additional Information RTECS: Not available			
12. ECOLOGICAL INF	RMATION		
Toxicity	no data a	vailable	
Persistence and degra	dability no data a	vailable	
Bioaccumulative pote	tial no data a	vailable	
Mobility in soil	no data a	vailable	
PBT and vPvB assess	nent no data a	vailable	
Other adverse effects	no data a	vailable	
13. DISPOSAL CONSI	ERATIONS		
<b>Product</b> Offer surplus and non-re	cyclable solutions to a lice	nsed disposal company.	
<b>Contaminated packag</b> Dispose of as unused p			

#### **14. TRANSPORT INFORMATION**

DOT (US)	Not dangerous goods.
IMDG	Not dangerous goods.
ΙΑΤΑ	Not dangerous goods.

# 15. REGULATORY INFORMATION OSHA Hazards

No known OSHA hazards

#### SARA 302 Components

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

#### SARA 313 Components

SARA 313: 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 Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know Components

Lithium Iron(II) Phosphate, CAS-No. 15365-14-7, Revision Date:

#### New Jersey Right To Know Components

Lithium Iron(II)phosphate, CAS-No. 15365-14-7, Revision Date:

#### 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.

#### **16. OTHER INFORMATION**

#### **Further information**

#### Copyright 2013 Battery Consulting.

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. Battery Consulting and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.electrodesandmore.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

