

# Safety Data Sheet

Regulation: In accordance with Regulation (EU) 2015/830 (REACH), Annex II, and OSHA 29 CFR 1910.1200

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Important Note:** As a solid, manufactured article, exposure to hazardous ingredients is not expected with normal use. This battery is an article pursuant to 29 CFR 1910.1200 and, as such, is not subject to the OSHA Hazard Communication Standard requirement. The information contained in this Safety Data Sheet contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

**Product Name:** 22" Peak Power Select Cut SP Lawn Mower Kit (2\*6Ah, 560W Dual Port Charger)

**Model Number:** LM2244SP-2

**Substance name:** Battery Pack (Packed with equipment)

**Synonyms:** Lithium-ion Battery, Lithium-ion Battery Pack, Li-Ion Battery, Li-Ion Battery Pack

**Manufacturer:** Nanjing Chervon Industry Co., Ltd.

**Address:** 529 South Jiang Jun Rd. Jiangning Economic & Technical Development Zone

Nanjing, Jiangsu 211106 P. R. China

**Company/undertaking Identification:** 1-352-323-3500 international (Account number: 109087)

### **Further Information:**

Battery-System: Lithium-ion (Li-ion)

Battery Model: BA3360T

Number of battery packs packed with the product: 2

Nominal Voltage: 56 V

Rated Capacity: 6.0 Ah

Wh Rating: 336 Wh

## 2. HAZARDS IDENTIFICATION

### GHS Classification

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

### Label elements

Symbols/Pictograms	None
Signal word	None
Hazard Statements	Not classified.
Precautionary Statements	
Prevention	None.
Response	None.

Storage None.  
Disposal None.

**Hazards not otherwise classified (HNOC)**

No information available

**Unknown acute toxicity**

No information available

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

The battery pack contains different quantity battery cells in it depending on the battery pack capacity.

Battery Pack Model Number	Quantity of the Battery Cells
BA3360T	42
BA3360T	42

**Chemical nature** Article

Chemical Name	CAS No	Weight-%
Cobalt lithium manganese nickel oxide	182442-95-1	30-32
Iron	7439-89-6	22-23
Copper	7440-50-8	15-16
Graphite	7782-42-5	14-15
Aluminum	7429-90-5	7-8
Polypropylene	9003-07-0	2-3
Phosphate(1-), hexafluoro-, lithium	21324-40-3	2-3

**4. FIRST-AID MEASURES**

**Description of first aid measures**

General advice In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Inhalation Not an expected route of exposure, IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin contact Wash hands thoroughly after handling.

Eye contact Not an expected route of exposure. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion Not an expected route of exposure. If swallowed, call a poison control center or physician immediately.

**Most important symptoms and effects, both acute and delayed**

No information available.

**Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	No information available.

### Special hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors  
Carbon oxides( $CO_x$ ), metal oxides

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers with flooding quantities of water until well after fire is out. Evacuate personnel to safe areas.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Do not touch or walk through spilled material. Avoid breathing vapors or mists.

### Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so.  
Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precaution for safe handling

Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation, especially in confined areas. Avoid generation of dust. Do not breath dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Use personal protection recommended in Section 8. Take precautionary measures against static discharges. Do not eat, drink or smoke when using this product.

### Condition for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition. Keep locked up and of reach of children. Keep away from food, drink and animal feeding stuffs. Store in accordance with local regulations.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	Denmark	European Union
Cobalt lithium manganese nickel oxide (CAS)	TWA: 0.02mg/m <sup>3</sup> Co TWA: 0.02mg/m <sup>3</sup>	-	IDHL:500 mg/m <sup>3</sup> Mn IDHL:10 mg/m <sup>3</sup> Ni	TWA:0.01 mg/m <sup>3</sup> TWA:0.2 mg/m <sup>3</sup>	-

#:182442-95-1)	Mn TWA: 0.1mg/m <sup>3</sup> Mn		TWA:1 mg/m <sup>3</sup> Mn TWA:0.015 mg/m <sup>3</sup> except Nickel carbonyl Ni STEL:3 mg/m <sup>3</sup> Mn		
Copper (CAS#:7440-50-8)	TWA:0.2mg/m <sup>3</sup> fume TWA:1mg/m <sup>3</sup> Cu dust and mist	--	IDHL:100 mg/m <sup>3</sup> dust, fume and mist IDHL:100 mg/m <sup>3</sup> Cu dust and mist TWA:1 mg/m <sup>3</sup> dust and mist TWA:0.1 mg/m <sup>3</sup> fume TWA:1 mg/m <sup>3</sup> Cu dust and mist	TWA:1.0 mg/m <sup>3</sup> TWA:0.1 mg/m <sup>3</sup>	-
Graphite (CAS#:7782-42-5)	TWA:2mg/m <sup>3</sup> respirable fraction all forms except graphite fibers	-	IDHL:1250 mg/m <sup>3</sup> TWA:2.5 mg/m <sup>3</sup> natural respirable dust	TWA:2.5 mg/m <sup>3</sup>	-
Aluminum (CAS#:7429-90-5)	TWA:1 mg/m <sup>3</sup> respirable fraction	TWA:15mg/m <sup>3</sup> total dust TWA:5mg/m <sup>3</sup> respirable fraction (vacated) TWA:15 mg/m <sup>3</sup> total dust (vacated) TWA:5 mg/m <sup>3</sup> respirable fraction (vacated) TWA:5 mg/m <sup>3</sup> Al Aluminum	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust TWA: 5 mg/m <sup>3</sup> Al	TWA: 5 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>	-
Phosphate(1-), hexafluoro-,lithium (CAS#:21324-40-3)	TWA:2.5 mg/m <sup>3</sup> F	-	--	TWA:2.5 mg/m <sup>3</sup>	-

Chemical Name	Latvia	France	Finland	Germany	Italy
Cobalt lithium manganese nickel oxide (CAS #: 182442-95-1)	TWA: 0.05 mg/m <sup>3</sup>	-	TWA: 0.05 mg/m <sup>3</sup> TWA: 0.01 mg/m <sup>3</sup> TWA: 0.02 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup> TWA: 0.02 mg/m <sup>3</sup> Ceiling/Peak: 1.6mg/m <sup>3</sup> Ceiling/Peak: 0.16mg/m <sup>3</sup> Ceiling/Peak: 0.2mg/m <sup>3</sup> Skin TWA: 0.5mg/m <sup>3</sup>	-
Copper (CAS#:7440-50-8)	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.2mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 0.01 mg/m <sup>3</sup>	-

	STEL: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	Ceiling/Peak: 0.02 mg/m <sup>3</sup> Ceiling/Peak: 0.2mg/m <sup>3</sup>	
Graphite (CAS#:7782-42-5)	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 1.5 mg/m <sup>3</sup> TWA: 4 mg/m <sup>3</sup>	-
Aluminum (CAS#:7429-90-5)	TWA: 2 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 1.5 mg/m <sup>3</sup>	TWA: 4 mg/m <sup>3</sup> TWA: 1.5 mg/m <sup>3</sup>	-
Polypropylene (CAS#:9003-07-0)	TWA: 5 mg/m <sup>3</sup>	-	-	-	-
Phosphate(1-), hexafluoro-,lithium (CAS#:21324-40-3)		-	-	TWA: 1 mg/m <sup>3</sup> Skin	-

Chemical Name	Poland	Portugal	Spain	Switzerland	Netherlands
Copper (CAS#:7440-50-8)	-	-	-	-	TWA: 0.1 mg/m <sup>3</sup>
Aluminum (CAS#:7429-90-5)	TWA: 2.5 mg/m <sup>3</sup> TWA: 1.2 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>	-

Chemical Name	Norway	United Kingdom	Australia	Austria	Belgium
Cobalt lithium manganese nickel oxide (CAS #: 182442-95-1)	TWA: 0.05 mg/m <sup>3</sup> TWA: 0.02 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> STEL: 0.05 mg/m <sup>3</sup> STEL: 0.02 mg/m <sup>3</sup> STEL: 1 ppm STEL: 0.1 mg/m <sup>3</sup>	-	1 mg/m <sup>3</sup>	Skin STEL: 2 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup>	-
Copper (CAS#:7440-50-8)	TWA: 0.1 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 0.1 mg/m <sup>3</sup> STEL: 1 mg/m <sup>3</sup>	-	1 mg/m <sup>3</sup> 0.2 mg/m <sup>3</sup>	STEL: 4 mg/m <sup>3</sup> STEL: 0.4 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup>	-
Graphite (CAS#:7782-42-5)	TWA: 5 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup> TWA: 4 mg/m <sup>3</sup> STEL: 5 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup> STEL: 4 mg/m <sup>3</sup>	-	3 mg/m <sup>3</sup>	STEL: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	-
Aluminum (CAS#:7429-90-5)	TWA: 5 mg/m <sup>3</sup> STEL: 5 mg/m <sup>3</sup>	STEL: 30 mg/m <sup>3</sup> STEL: 12 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup> TWA: 4 mg/m <sup>3</sup>	10 mg/m <sup>3</sup> 5 mg/m <sup>3</sup>	STEL: 20 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>	-

Phosphate(1-), hexafluoro-,lithium (CAS#:21324-40-3)	-	-	2.5 mg/m <sup>3</sup>	-	-
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### **Appropriate engineering controls**

Ensure adequate ventilation, especially in confined areas. Removed all sources of ignition.

### **Individual protection measures, such as personal protective equipment**

Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentration. Respiratory protection must be provided in accordance with current local regulations.
Hand protection	Wear protective gloves.
Eye/face protection	No special technical protective measures are necessary.
Skin and body protection	Suitable protective clothing.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Information on basic physical and chemical properties**

<b>Appearance</b>	Solid
<b>Color</b>	No information available
<b>Odor</b>	No information available
<b>Odor Threshold</b>	Not determined
<b>pH</b>	Not determined
<b>Melting point/freezing point</b>	Not determined
<b>Boiling point/boiling range</b>	Not determined
<b>Flash point</b>	Not applicable
<b>Evaporation rate</b>	Not determined
<b>Flammability (solid, gas)</b>	Not flammable
<b>Flammability Limit in Air</b>	Not applicable
<b>Vapor Pressure</b>	Not determined
<b>Vapor density</b>	Not applicable
<b>Density</b>	Not determined
<b>Relative density</b>	Not determined
<b>Bulk density</b>	Not determined
<b>Specific gravity</b>	Not determined
<b>Water solubility</b>	Not determined
<b>Partition coefficient (LogPow)</b>	Not determined
<b>Autoignition temperature</b>	Not applicable
<b>Decomposition temperature</b>	Not determined
<b>Kinematic viscosity</b>	Not determined
<b>Dynamic viscosity</b>	Not determined
<b>Explosive properties</b>	Not an explosive
<b>Oxidizing properties</b>	Not determined

### **Other information**

No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

Stable under recommended storage and handling conditions (see SECTION 7, handling and storage).

### Chemical stability

Stable under normal conditions

### Possibility of Hazardous Reactions

None under normal processing

### Conditions to avoid

Strong heating. Incompatible materials.

### Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

### Hazardous Decomposition Products

Carbon oxides ( $CO_x$ ), metal oxides.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

Inhalation	Not an expected route of exposure
Eye contact	Dust contact with the eyes can lead to mechanical irritation
Skin contact	No known effect based on information supplied
Ingestion	Not an expected route of exposure

### Information on toxicological effects

#### Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Iron (CAS#: 7439-89-6)	98.6 g/kg bw(rat)	-	-
Copper (CAS#:7440-50-8)	>2500 mg/kg bw(rat)	>2000 mg/kg bw(rat)	=1.03 mg/L/4h (rat)
Graphite (CAS#:7782-42-5)	>2000 mg/kg (rat)	-	>2000 mg/m <sup>3</sup> /4h(rat)
Aluminum (CAS#:7429-90-5)	LD50>15900 mg/kg bw(rat)	-	LC50>0.888 mg/L/4h(rat)
Polypropylene (CAS#:9003-07-0)	>5g/kg	-	-

### Skin corrosion/irritation

Non-irritating to the skin

**Serious eye damage/eye irritation**

No eye irritation

**Sensitization**

No information available

**Germ cell mutagenicity**

No information available

**Carcinogenicity**

Chemical name	ACGIH	IARC	NTP	OSHA
Cobalt lithium manganese nickel oxide (CAS#: 182442-95-1)	A3	-	Known	-
Polypropylene (CAS#:9003-07-0)	-	Group 3	-	-

**Reproductive toxicity**

No information available

**STOT- single exposure**

No information available

**STOT- repeated exposure**

No information available

**Aspiration hazard**

No information available

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Chemical Name	Algae/aquatic plants EC50	Fish LC50	Crustacea EC50
Iron (CAS#: 7439-89-6)	-	13.6: 96h Morone saxatilis mg/L LC50 static	> 100mg/l/48h (Daphnia magna)
Copper (CAS#:7440-50-8)	0.031-0.054mg/L/96h Pseudokirchneriella subcapitata static 0.0426-0.0535mg/L/72h Pseudokirchneriella subcapitata static	1.25: 96h Lepomis macrochirus mg/L LC50 static 0.3: 96h Cyprinus carpio mg/L LC50 semi-static 0.8: 96h Cyprinus carpio mg/L LC50 static 0.112: 96h Poecilia reticulata mg/L LC50 flow-through 0.0068-	-



Hazard Class: 9

ICAO/IATA (air transportation):

The product shall meet the General Requirements and Packaging Instruction 966 I.

IMO (sea transportation):

The product shall meet the General Requirements and Packing instruction of P903, P908, P909, P910, LP903 & LP904.

U.S. DOT (ground transportation):

The product shall meet the requirement of US Hazardous Materials Regulations 49 CFR (Code of Federal Regulations) Sections 173.185 in USA.

Canada TDG (ground transportation):

The product shall meet the requirement of Transportation of Dangerous Goods Regulations in Canada.

European Agreements ADR/RID/AND (ground transportation):

The product shall meet the General Requirements and Packing instruction of P903, P908, P909, P910, LP903 & LP904.

Australian Dangerous Goods ADG (ground transportation):

The product shall meet the General Requirements and Packing instruction of P903, P908, P909, P910, LP903 & LP904.

## 15. REGULATORY INFORMATION

### International Inventories

Component	AICS	DSL/NDSL	EINECS/ ELINCS	ENCS	IECSC	KECL	PICCS	TSCA
Cobalt lithium manganese nickel 182442-95-1 (30-32)	-	-	-	-	X	-	-	X
Iron 7439-89-6 (22- 23)	X	X	X	Exempt	X	X	X	X
Copper 7440-50-8 (15-16)	X	X	X	Exempt	X	X	X	X
Graphite 7782-42-5 (14-15)	X	X	X	Exempt	X	X	X	X
Aluminum 7429-90- 5 (7-8)	X	X	X	Exempt	X	X	X	X
Polypropylene 9003- 07-0 (2-3)	X	X	-	X	X	X	X	X
Phosphate(1-), hexafluoro-,lithium 21324-40-3 (2-3)	X	X	X	X	X	X	X	X

"-" Not listed

"X" Listed

### **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 196 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313-Threshold Values %
Aluminum-7429-90-5	1.0

#### **SARA 311/312 Hazard Categories**

Not applicable

#### **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA-Reportable Quantities	CWA-Toxic Pollutants	CWA-Priority Pollutants	CWA-Hazardous Substances
Cobalt lithium manganese nickel 182442-95-1	-	X	-	-
Copper 7440-50-8	-	X	X	-

#### **CERCLA**

Not applicable

### **US State Regulations**

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Cobalt lithium manganese nickel 182442-95-1	Carcinogen

#### **U.S. State Right-to-Know Regulations**

This product may contain substances regulated by state right-to-know regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Cobalt lithium manganese nickel 182442-95-1	X	-	-
Copper 7440-50-8	X	X	
Graphite 7782-42-5	X	X	
Aluminum 7429-90-5	X	X	X
Phosphate(1-), hexafluoro-,lithium 21324-40-3	X	-	-

## **16. OTHER INFORMATION**

### **Revision Note**

Issue Date	12-Jan-2016
Revision date	27-Feb-2018
Revision Note	Update transport information

### **Key or legend to abbreviations and acronyms used in the safety data sheet**

**TWA** – TWA (time-weighted average)

**STEL** – STEL (Short Term Exposure Limit)

**Ceiling** – Maximum limit value

**TSCA** – United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** – Canadian States Toxic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** – European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** – Japan Existing and New Chemical Substances

**IECSC** - China Existing and New Chemical Substances

**KECL** – Korean Existing and Evaluated Chemical Substances

**PICCS** – Philippines Inventory of Chemical and Chemical Substances

**AICS** – Australian Inventory of Chemical Substances

### **Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the test.