



Safety Data Sheets

Name of Goods: Li-ion Battery

Commissioner: J&Y TECHNOLOGY CO., LTD.

Dongguan UTL Electronic Technology Co., Ltd.

Safety Data Sheet (SDSs)

Name of goods	Li-ion Battery
Type/Mode	Li-ion 18650 2000mAh/14.8v 2000mAh 29.6Wh
Commissioned by	J&Y TECHNOLOGY CO., LTD
Commissioner address	Henggangling, Chanjing, Xinxu Town, Huiyang District, Huizhou City, Guangdong, China
Manufacturer	J&Y TECHNOLOGY CO., LTD
Manufacturer address	Henggangling, Chanjing, Xinxu Town, Huiyang District, Huizhou City, Guangdong, China
Factory	J&Y TECHNOLOGY CO., LTD
Factory address	Henggangling, Chanjing, Xinxu Town, Huiyang District, Huizhou City, Guangdong, China
Inspection according to	OSHA GHS 《A Guide to The Globally Harmonized System of Classification and Labelling of Chemicals》 IATA DGR 《Dangerous Goods Regulations》 IMO IMDG CODE 《INTERNATIONAL MARITIME Dangerous Goods CODE》
Receiving date: 2018-05-09 Date of issue: 2018-05-20	

Approved by:



Reviewed by:

Tested by:

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product name: Li-ion Battery
Model: Li-ion 18650 2000mAh/14.8V, 14.8V 2000mAh 29.6Wh

Other means of identification

Synonyms: None

Recommended use of the chemical and restrictions on use

Recommended Use: LITHIUM ION BATTERIES
Uses advised against: No information available

Details of the supplier of the safety data sheet

Supplier Name J&Y TECHNOLOGY CO., LTD
Supplier Address Henggangling, Chanjing, Xinxu Town, Huiyang District,
Huizhou
Guangdong
516223
CN
Supplier Phone Number Phone: 86-0752-3335961
Fax: 85-0752-3335960
Supplier Email jessica@jybattery.net
Emergency telephone number
Company Emergency Phone 86-13802709455
Number

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). This product is an article which is a sealed battery and as such does not require an MSDS per the OSHA hazard communication standard unless ruptured. The hazards indicated are for a ruptured battery.

Skin corrosion/irritation	Category 1 Sub-category
Serous eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1

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GHS Label elements, including precautionary statements**Emergency Overview**

Signal word	Danger
Hazard Statements Causes severe skin burns and eye damage May cause an allergic skin reaction May cause cancer Causes damage to organs through prolonged or repeated exposure	
	
This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold. Intended use of the product should not result in exposure to the chemical substance. This is a battery. In case of rupture: the above hazards exist.	
Appearance	No information available
Physical state	Solid
Odor	No information available

Precautionary Statements-prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves
 Do not eat, drink or smoke when using this product

Precautionary Statements-Response

Immediately call a POISON CENTER or doctor/physician
 Specific treatment (see supplemental first aid instructions on this label)

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse

If skin irritation or rash occurs: Get medical advice/attention

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in position comfortable for breathing Immediately call a POISON CENTER or doctor/physician

Ingestion

IF SEALLOWED: Rinse mouth. DO NOT induce vomiting

Precautionary Statements- Storage

Store locked up

Precautionary Statements-Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

20% of the mixture consists of ingredient(s) of unknown toxicity

Other information

May be harmful if swallowed

May be harmful in contact with skin

Very toxic to aquatic life with long lasting effects

Repeated or prolonged skin contact may cause allergic reactions with susceptible persons

Interactions with Other Chemicals

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Common Chemical Name	Chemical Formula	Concentration (%)	CAS Number
Lithium Cobalt Dioxide	LiCoO ₂	25-30	12190-79-3
Graphite	C ₂₄ X ₁₂	15-20	7782-42-5

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Polyvinylidene Fluoride(PVDF)	$(C_2H_2F_2)_n$	0.5-2	24937-79-9
Copper Foil (Cu)	Cu	5-10	7440-50-8
Aluminium	Al	5-10	7429-90-5
Lithium Hexafluorophosphate	$LiPF_6$	5-10	21324-40-3
Polyethylene	$(C_2H_4)_n$	10-15	9002-88-4
Nickel	Ni	5-10	7440-02-0
Iron	Fe	15-20	7439-89-6

4. FIRST-AID MEASURES

First aid measures

General Advice

First aid is upon rupture of sealed battery

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Seek immediate medical attention/advice.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction. Seek immediate medical attention/advice.

Inhalation

Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth- to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get medical attention immediately if symptoms occur.

Ingestion

Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

Self-protection of the

Ensure that medical personnel are aware of the material(s) involved, take

first aider

precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

Most Important Symptoms/Effects, both acute and delayed**Most Important
Symptoms and Effects**

Burning sensation. Itching. Rashes. Hives. Coughing and/ or wheezing.

Indication of any immediate medical attention and special treatment needed**Notes to Physician**

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high plus pressure. May cause sensitization in susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. Product is or contains a sensitizer. May cause sensitization by skin contact.

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Other Information

Refer to protective measures listed in Sections 7 and 8.

Environmental Precautions

Environmental precautions

Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for Cleaning up

Pick up and transfer to properly labelled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling

In case of rupture: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.

Incompatible Products.

Acids. Bases. Oxidizing agent.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**Control parameters****Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lithium Cobalt Oxide(LiCoO ₂) 12190-79-3	TWA: 0.02 mg/m ³	-	
Carbon black 1333-86-4	TWA: 3 mg/m ³ inhalable	TWA: 3.5mg/m ³ (vacated)TWA: 3.5 mg/m ³	IDLH: 1750 mg/m ³ TWA: 3.5 mg/m ³ TWA: 0.1 mg/m ³ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH

Phosphate(1-), hexafluoro-, lithium 21324-40-3	TWA: 2.5 mg/m ³ F	TWA: 2.5 mg/m ³ F TWA: 2.5 mg/m ³ dust (vacated)TWA: 2.5 mg/m ³	
Copper 7440-50-8	TWA: 0.2 mg/m ³ fume TWA: 1 mg/m ³ dust and mist	TWA:0.1 mg/m ³ fume TWA: 1 mg/m ³ dust and mist (vacated)TWA: 0.1mg/m ³ Cu dust, fume, mist	IDLH: 100mg/m ³ dust, fume and mist TWA: 1mg/m ³ dust and mist TWA: 0.1 mg/m ³ fume
Aluminum 7429-90-5	TWA: 1 mg/m ³ respirable fraction	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated)TWA: 15 mg/m ³ total dust (vacated)TWA:5 mg/m ³ respirable fraction(vacated) TWA: 5 mg/m ³ Al Aluminum	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust

Nickel 7440-02-0	TWA: 1.5 mg/m ³	TWA: 1 mg/m ³ (vacated)TWA: 1 mg/m ³	IDLH: 10 mg/m ³ TWA: 0.015 mg/m ³
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ACGIH TLV: American Conference of Governmental Industrial Hygienists- Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration – Permissible Exposure Limits NIOSH Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992)

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Face protection shield

Skin and Body protection Wear protection gloves and protective clothing. Long sleeved clothing.
Chemical resistant apron. Impervious gloves.

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 concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Handle in accordance with good Industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical state Solid

Appearance No information available **Odor** No information available

Color No information available **Odor Threshold** No information available

Property **Values** **Remarks Method**

pH No data available None known

Melting / freezing point No data available None known

Boiling point / boiling range No data available None known

Evaporation Rate No data available None known

Flammability(solid, gas) No data available None known

Flammability Limit in Air

Upper flammability limit No data available None known

Lower flammability limit No data available None known

Flammability pressure No data available None known

Vapor pressure No data available None known

Vapor density No data available None known

Specific Gravity No data available None known

Water Solubility No data available None known

Solubility in other solvents No data available None known

Partition coefficient: n-octanol/water No data available None known

Autoignition temperature No data available None known

Kinematic viscosity No data available None known

Dynamic viscosity No data available None known

Explosive properties No data available None known

Oxidizing properties No data available None known

Other Information

Softening Point No data available

VOC Content (%) No data available

Particle Size No data available

Particle Size Distribution

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage and handling conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Exposure to air or moisture over prolonged periods.

Incompatible materials

Acids. Bases. Oxidizing agent.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routed of exposure

Product Information

Product does not present an acute toxicity hazard based on known or supplied information. In case of rupture

Inhalation

Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of respiratory tract.

Eye contact

Specific test data for the substance or mixture is not available. Cause burns. (based on components). Corrosive to the eyes and may cause severe damage including blindness. Cause serious eye damage. May cause irreversible damage to eyes.

Skin contact

Specific test data for the substance or mixture is not available. Corrosive. (based on components). Cause burns.

Ingestion

Specific test data for the substance or mixture is not available. Cause burns. (based on components). Ingestion cause burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation
Carbon black 1333-86-4	> 15400 mg/kg(Rat)	>3 g/kg (Rabbit)	-
Nickel 7440-02-0	>90000 mg/kg(Rat)	-	-

Information on toxicological effects**Symptoms**

Erythema (skin redness). Burning. May cause blindness. Coughing and/ wheezing. Itching. Rashes. Hives

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Sensitization**

May cause sensitization by skin contact.

Mutagenic Effects

No information available.

Carinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Lithium Cobalt Oxide (LiCoO ₂) 12190-79-3	A3	Group 2B		X
Carbon black 1333-86-4	A3	Group 2B		X

Nickel 7440-02-0		Group 1 Group 2B	Reasonably Anticipated	X
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ACGIH (American Conference of Governmental Industrial Hygienists)

A3 – Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 – Carcinogenic to Humans

Group 2B – Possibly Carcinogenic to Humans

NTP (national Toxicology Program)

Reasonably Anticipated – Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X – Present

Reproductive toxicity No information available

STOT – single exposure No information available

Cause damage to organs through prolonged or repeated exposure. Based on classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910. 1200), this product has been determined to cause systemic target organ toxicity from chronic or repeated exposure. (STOT RE).

STOT – repeated exposure

Chronic Toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Contains a known or suspected carcinogen. Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse liver effects.

Target Organ Effects Respiratory system. Eyes. Skin. Gastrointestinal tract (GI). Kidney. Liver. Lungs. Lymphatic System. Nasal cavities

Aspiration Hazard No information available

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)

4,000.00 mg/kg

ATEmix (dermal)

2,400.00 mg/kg (ATE)

12. Ecological information**Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Chemical name	Toxicity to Algao	Toxicity to fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Carbon black 1333-86-4				24h EC50:>5600mg/L
Copper 7440-50-8	96h EC50: 0.031-0.054mg/L (Pseudokirchneriella subcapitata) 72h EC50: 0.0426-0.0535 mg/L (Pseudokirchneriella subcapitata)	96h LC50: 0.0068-0.0156 mg/L (Pimephales promelas) 96h LC50:=1.25 mg/L (Lepomis macrochirus) 96h LC50:=0.052 mg/L (Oncorhynchus mykiss) 96h LC50:=0.2mg/L(pimephales promelas) 96h LC50:<0.3 mg/L(pimephales promelas) 96h LC50:=0.112mg/L(pimephales promelas) 96h LC50:=0.112 mg/L(poecilia reticulata) 96h LC50:=0.3 mg/L)Cyprinus carpio) 96h LC50:=0.8 mg/L (Cyprinus carpio)		48h EC50:=0.03mg/L
Nickel 7440-02-0	72h EC50:=0.18mg/L (Pseudokirchneriella subcapitata) 96h EC50:0.174-0.311 mg/L(Pseudokirchneriella subcapitata)	96h LC50:>100mg/L (brachydanio rerio) 96h LC50:=1.3mg/L(Cyprinus carpio) 96h LC50:=10.4 mg/L (Cyprinus carpio)		48h EC50:>100 mg/L 48h EC50:=1 mg/L

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal methods**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements

Contaminated Packaging

Dispose of contents/containers in accordance with local regulations.

California Hazardous Waste Codes

This product contains one or more substances that are listed with the State of California as a hazardous waste

Chemical name	California Hazardous Waste
Lithium Cobalt Oxide(LiCoO ₂) 12190-79-3	Toxic
Copper 7440-90-5	Toxic
Aluminum 7429-90-5	Ignitable powder
Nickel 7440-02-0	Toxic powder Ignitable powder

14. TRANSPORT INFORMATION**Note:**

The transportation of primary lithium cells and batteries is regulated by the international Civil Aviation Organization, International Air Transport Association, International Maritime Dangerous Goods Code and the US Department of Transportation. The batteries must meet the following criteria for shipment:1. Air shipment must meet the requirements listed in Special

Provision A45 of the International Air Transport Association Dangerous Goods Regulations. 2. Meet the requirements for the US Department of Transportation listed in 49 CFR 173.185.3. The transport of primary lithium batteries is prohibited aboard passenger aircraft. Refer to the Federal Register December 15, 2004 (Hazardous Materials; Prohibited on the Transportation of Primary Lithium Batteries and Cells Aboard Passenger Aircraft; Final Rule)

Lithium batteries shipped as "Lithium batteries", "Lithium batteries packed with equipment", or "Lithium batteries contained in equipment" may not be classified as "Dangerous Goods", when shipped in accordance with "special provision A45 of IATA-DGR" or "special provision 188 of IMO-IMDG Code"

<u>DOT</u>	NOT REGULATED
Proper Shipping Name	NOT REGULATED
Hazard Class	N/A
Emergency Response Guide Number	147
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO</u>	Not regulated
<u>IATA</u>	Not regulated
Proper Shipping Name	NOT REGULATED
Hazard Class	N/A
<u>IMDG/IMO</u>	Not regulated
Hazard Class	N/A
EmS-No.	F-A, S-I
<u>RID</u>	Not regulated
<u>ADR</u>	Not regulated
<u>ADN</u>	Not regulated

15. REGULATORY INFORMATION

International Inventories**TSCA**

Complies

DSL

All components are listed either on the DSL or NDSL

TSCA – United States Toxic Substance Control Act Section 8(b) Inventory**DSL/NDSL** – Canadian Domestic Substance List/Non-Domestic Substances List**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986(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	CAS No	Weight-%	SARA 313-Threshold Values %
Lithium Cobalt Oxide (LiCoO ₂)- 12190-3	12190-79-3	30-60	0.1
Copper – 7440-50-8	7440-50-8	7-13	1.0
Aluminum – 7429-90-5	7429-90-5	5-10	1.0
Nickel – 7440-02-0	7440-02-0	1-5	0.1

SARA 311/312 Hazard Categories**Acute Health Hazard** No**Chronic Health Hazard** No**Fire Hazard** No**Sudden release of pressure hazard** No**CWA (Clean Water Act)**

This product contains the following substance which are regulated pollutants pursuant 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
Copper		X	X	

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7440-50-8				
Nickel 7440-02-0		X	X	

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40CFR 302)

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Copper 7440-50-8	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Nickel 7440-02-0	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

US State Regulations**California Proposition 65**

This product contains the following Propositions 65 chemicals

Chemical name	California Proposition 65
Carbon black – 1333-86-4	Carcinogen
Nickel – 7440-02-0	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode island	Illinois
Lithium Cobalt Oxide (LiCoO ₂) 12190-79-3	X		X	X	X
Carbon black 1333-86-4	X	X	X		X
Copper 7440-50-8	X	X	X	X	X
Aluminum 7429-90-5	X	X	X	X	
Nickel 7440-02-0	X	X	X	X	X

International Regulations

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Mexico**National occupational exposure limits**

Component	Carcinogen Status	Exposure Limits
Carbon black 1333-86-4(10-30)		Mexico: TWA 3.5 mg/m ³ Mexico: STEL 7 mg/m ³
Copper 7440-50-8(7-13)		Mexico: TWA =1 mg/m ³ Mexico: TWA =0.2 mg/m ³ Mexico: STEL =2mg/m ³
Aluminum 7429-90-5(5-10)		Mexico: TWA =10 mg/m ³
Nickel 7440-02-0(1-5)		Mexico: TWA1 mg/m ³

Mexico – Occupational Exposure Limits – Carcinogens

Canada**WHMIS Hazard Class**

Non-controlled

16. OTHER INFORMATION

NFPA	Health Hazards 1	Flammability 0	Instability 0	Physical and Chemical Hazards-
NFPA	Health Hazards 1	Flammability 0	Instability 0	Physical and
HMIS	Health Hazards 0	Flammability 0	Instability 0	Personal Protection
				X

Prepared By Product Stewardship 23 British American Blvd. Latham, Ny 12110 1-800-572-6501

Issuing Date 20-May-2018

Revision Date 20-May -2018

Revision Note No information available

Disclaimer

The information provided in this 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 text

End of Safety Data Sheet

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