

MSDS Report

Applicant's name	NEMO POWER TOOLS LIMITED No.2 DunBei Industrial District Sanlian Village, Long Hua New District, Shenzhen, Guangdong, China 518109	
Applicant's Address		
Name of Sample	Lithium Ion Battery	
Model	4S-WHDL	
Nominal Voltage	14.8V	
Rated Capacity	2600mAh, 38.48Wh	
Weight	195.1g	
Size (L×W×T)	(76.0×37.4×37.4)mm	
Prepared By	Shenzhen TCT Testing Technology Co., Ltd. 1B/F., Building 1, Yibaolai Industrial Park, Qiaotou, Fuyong, Baoan District, Shenzhen, Guangdong, China.	
Report No.	TCT201229M105	

Written by: Carry Wang

Approved by:__

Date: 2021. 01. 01

Tomsin

Inspected by:

Army Zeng

Report No.: TCT201229M105

Page 1

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Name of Sample	Lithium Ion Battery		
Manufacturer's name	Shenzhen Tianlihe Technology Co	o., Ltd	
Manufacturer's Address	2 Floor, 3 Building ,Tianhao Indus District, Shenzhen, Guangdong	strial Park, Songbai F	Road, Shiyan Town, Bao'a
Contact Person	Ms. Huang	(c ⁴)	(c ⁴)
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E-mail	sourcing@nemopowertools.com	(0)	

Section 2- Hazards Identification			
Classification of Danger	See section 14.		
Primary Route(s) of Exposure	Eye, skin contact, ingestion.		
Health Hazard	The batteries are not hazardous when used according to the instructions of manufacturer under normal conditions. In case of abuse, there's Hazard of rupture, fire, heat, leakage of internal components, which could cause casualty loss. Abuses including but not limited to the following cases: charged for long time, short circuited, put into fire, whacked with hard object, punctured with acute object, crushed, and broken.		

Report No.: TCT201229M105 Page 2 of 8 Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com



Section 3- Composition/In	formation on Ingredients	
Chemical Name	Concentration or concentration ranges (%)	CAS Number
Lithium Cobalt Oxide (CoLiO ₂)	30-60	12190-79-3
Graphite	10-30	7782-42-5
Phosphate(1-), hexafluoro-, lithium	10-30	21324-40-3
Copper	5-10	7440-50-8
Aluminum foil	1-5	7429-90-5
Nickel	1-5	7440-02-0
PVC (Chloroethylene, polymer)	1-5	9002-86-2

Labeling according to EC directives.

No symbol and Hazard phrase are required.

Note: CAS number is Chemical Abstract Service Registry Number.

N/A=Not apply.

Section 4- First Aid Measures		
Eye	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.	
Skin	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.	
Inhalation	Remove from exposure and move to fresh air immediately. Use oxygen if available.	
Ingestion	Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician.	

Section 5- Fire Fi	ighting Measures
Characteristics of Hazard	Dusts at sufficient concentrations can form explosive mixtures with air. Combustion generates toxic fumes.
Hazardous Combustion Products	Carbon dioxide.
Fire-extinguishing Methods and	For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

Report No.: TCT201229M105

Page 3 of 8 Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com



Extinguishing Media		
Attention in Fire-extinguishing	Wear self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.	

Section 6- Accidental Release Measures			
Personal Precautions, protective equipment, and emergency procedures	In case of rupture. Attention! Corrosive material. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Refer to protective measures listed in Sections 7 and 8.		
Environmental Precautions	Prevent product from contaminating soil and from entering sewers or waterways.		
Methods and materials for Containment	Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately.		
Methods and materials for cleaning up	Absorb spilled material with an inert absorbent (dry sand or earth). Scoop contaminated absorbent into an acceptable waste container. Collect all contaminated absorbent and dispose of according to directions in Section 13. Scrub the area with detergent and water; collect all contaminated wash water for proper disposal.		

Section 7- Handling and Storage			
Handling	The battery may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity.		
Storage	Store in a cool, dry, well-ventilated area away from incompatible substances. Store locked up. Keep out of the reach of children.		
Other Precautions	In case of rupture. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Use personal protection equipment.		

Section 8 - Exposure Controls/Personal Protection	
Engineering Controls	Use adequate ventilation to keep airborne concentrations low. If used under conditions that

Report No.: TCT201229M105 Page 4 of 8
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com



	generate particulates, the ACGIH TLV-TWA of 3mg/m³ respirable fraction (10mg/m³ total) should be observed.
	Eye and Face Protection: None required for consumer use. If there is a Hazard of contact: Tight sealing safety goggles. Face protection shield.
Personal Protective Equipment	Skin and Body Protection: None required for consumer use. If there is a Hazard of contact: Wear protective gloves and protective clothing.
	Respiratory Protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Section 9- Phy	sical and Chemical Properties	
	Appearance: Prismatic	
Physical State	Color: Blue	
	Odour: If leaking, smells of medical ether.	
Change in condit	tion	
рН	Not applicable as supplied.	
Flash Point	Not applicable unless individual components exposed.	
Flammability	Not applicable unless individual components exposed.	
Relative density:	Not applicable unless individual components exposed.	
Solubility (water)	Not applicable unless individual components exposed.	
Solubility (other)	Not applicable unless individual components exposed.	

Section 10 – Stability and Reactivity	
Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing.
Conditions to Avoid	Exposure to air or moisture over prolonged periods.
Incompatible materials	Acids, Oxidizing agents, Bases.
Hazardous Decomposition Products	Carbon oxides.



Section 11 – Toxicological Information	
Irritation	In the event of exposure to internal contents, vapour fumes may be very irritating to the eyes and skin.
Sensitization	Not Available.
Reproductive Toxicity	Not Available.
Toxicologically Synergistic Materials	Not Available.

Section 12-Ecological Information	
General note:	Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Anticipated behavior of a chemical product in environment/possible environmental impact/ ecotoxicity	Not Available.

Section 13 – Disposal Considerations	
Waste Treatment	Recycle or dispose of in accordance with government, state & local regulations.
Attention for Waste Treatment	Deserted batteries shouldn't be treated as ordinary trash. Shouldn't be thrown into fire or placed in high temperature. Shouldn't be dissected, pierced, crushed or treated similarly. Best disposal method is recycling.

Section 14 – Transport Information		
UN number	3480 & 3481	
Proper shipping name	Lithium ion batteries (limited to a maximum of 30% SoC) or; Lithium ion batteries packed with equipment (including lithium ion polymer batteries) or; Lithium ion batteries contained in equipments (including lithium ion polymer batteries).	
Label(s) / Placard Required	Miscellaneous Lithium batt	

Special precautions which a user needs to be aware of, or needs to comply with, in

Report No.: TCT201229M105 Page 6 of 8 Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com



connection with transport or conveyance either within or outside their premises		
ICAO / IATA:	Can be shipped by air in accordance with International Civil Aviation Organization (ICAO), TI or International Air Transport Association (IATA), DGR Packing Instructions (PI) 965, PI 966 and PI 967 Section II appropriate of IATA DGR 62 nd (2021 Edition) for transportation.	
IMDG CODE:	The batteries are not restricted to IMDG Code 2018 Edition (Amdt 39-18) according to special provision 188.	
DOT:	Other requirements for the US Department of Transportation (DOT) Subchapter C, Hazardous Materials Regulations if shipped in compliance with 49 CFR 173.185.	
ADR/ ADN:	The batteries are not subject to the provisions of United Nations Economic Commission for Europe (UNECE) ADR/ADN if they meet the requirements of special provision 188 of Chapter 3.3. Applicable as from 1 January 2019.	

In addition, to be permitted in transport each lithium cell and battery types must have passed the applicable tests set out in Subsection 38.3 of the UN Manual of Tests and Criteria.

Section 15 - Regulatory Information

Dangerous Goods Regulations

Recommendations on the Transport of Dangerous Goods-Model Regulations (21st revised edition)

Recommendations on the Transport of Dangerous Goods-Manual of Tests and Criteria

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG Code 2018 Edition Amdt 39-18)

Technical Instructions for the Safe Transport of Dangerous Goods

Classification and code of dangerous goods (GB 6944-2012)

2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Toxic Substance Control Act (TSCA)

Code of Federal Regulations

In accordance with all Federal, State and local laws

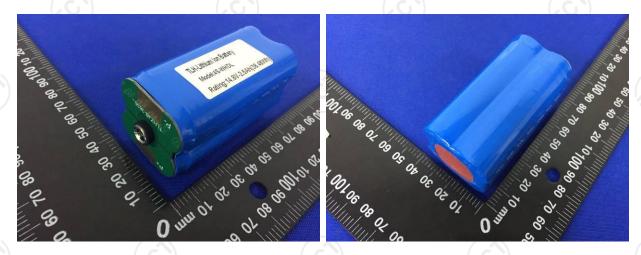
Report No.: TCT201229M105 Page 7 of 8
Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com



Section 16 – Additional Information

MSDS creation date: 2021 Version: V1.0

Sample photo:



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Report Search Number: TCT201229M105

Search System: http://www.tct-lab.com Page 8 of 8