SAFETY DATA SHEET

Issuing Date 17-Mar-2025 Revision Date 13-Mar-2025 Revision Number 1

NGHS / English



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1. IDENTIFICATION

Product identifier

Product Name Rechargeable Li-ion Battery L24M3P70 by Simplo

Other means of identification

Product Code(s) 1843222

Recommended use of the chemical and restrictions on use

Recommended Use Lithium Ion Battery

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Identification Lenovo LNB laptops

Address Songtao Road 696

shanghai shanghai 201203 CN

Telephone Phone:18116118603

E-mail yuanbb1@lenovo.com

Emergency telephone number

Company Emergency Phone

Number

18116118603

2. HAZARDS IDENTIFICATION

Classification

Skin sensitization	Category 1
Carcinogenicity	Category 1B

This is a battery. In case of rupture: the above hazards exist.



Appearance Black Physical state Solid Odor Odorless

GHS Label elements, including precautionary statements

Danger

Hazard statements

May cause an allergic skin reaction May cause cancer



Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing must not be allowed out of the workplace

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Specific treatment (see supplemental first aid instructions on this label)

Skin

IF ON SKIN: Wash with plenty of water and soap

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

Wash contaminated clothing before reuse

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

Causes mild skin irritation. Very toxic to aquatic life with long lasting effects.

Unknown acute toxicity 32.81 % of the mixture consists of ingredient(s) of unknown toxicity

28.01 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

32.81 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

32.81 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

32.81 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

32.81 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.



Mixture

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Lithium Cobalt Oxide (CoLiO2)	12190-79-3	44.97	-	-
Graphite	7782-42-5	24.45	-	-
Aluminum	7429-90-5	5.98	-	-
Copper	7440-50-8	5.49	-	-
Carbon black	1333-86-4	4.8	-	-
Ethylene carbonate	96-49-1	3.57	-	-
1,3-Propane sultone	1120-71-4	0.47	-	-
Nickel	7440-02-0	0.15	-	-

4. FIRST AID MEASURES

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get

medical advice/attention. First aid is upon rupture of sealed battery. In case of rupture:

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation

or allergic reactions see a physician.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

surrounding environment.

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

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

Product is or contains a sensitizer. May cause sensitization by skin contact.

Hazardous Combustion Products Carbon oxides.



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Explosion Data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal Personal precautions

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.

Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Methods for containment

Pick up and transfer to properly labeled containers. Methods for cleaning up

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling In case of rupture: Handle in accordance with good industrial hygiene and safety practice.

> Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. 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

Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. **Storage Conditions**

Keep out of the reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lithium Cobalt Oxide (CoLiO2)	TWA: 0.02 mg/m ³	-	
12190-79-3			
Graphite	TWA: 2 mg/m ³ respirable	TWA: 15 mg/m³ total dust	IDLH: 1250 mg/m ³
7782-42-5	particulate matter all forms	synthetic	TWA: 2.5 mg/m ³ respirable
	except graphite fibers	TWA: 5 mg/m ³ respirable	dust
		fraction synthetic	
		TWA: 15 mppcf respirable dust	



					natural		
					TWA: 2.5 mg/m ³		
					le dust natural		
					VA: 10 mg/m ³ total		
					synthetic		
) TWA: 5 mg/m ³		
					fraction synthetic		
					5 mppcf natural		
Aluminum		TWA: 1 mg/m ³			mg/m³ total dust		A: 10 mg/m ³ total dust
7429-90-5		particulate r	matter		ig/m³ respirable	TWA:	5 mg/m ³ respirable dust
					fraction		
				(vacated) TV	VA: 15 mg/m ³ total		
					dust		
				` ') TWA: 5 mg/m ³		
					able fraction		
Copper		TWA: 0.2 mg/r	n³ fume		1 mg/m³ fume	DLH	I: 100 mg/m³ dust, fume
7440-50-8					m ³ dust and mist		and mist
					WA: 0.1 mg/m ³ Cu		1 mg/m ³ dust and mist
					, fume, mist	TV	VA: 0.1 mg/m ³ fume
Carbon black		TWA: 3 mg/m ³		TWA: 3.5 mg/m ³			IDLH: 1750 mg/m ³
1333-86-4		particulate r	matter	(vacated)	TWA: 3.5 mg/m ³		TWA: 3.5 mg/m ³
							: 0.1 mg/m³ Carbon black
							presence of Polycyclic
						aron	natic hydrocarbons PAH
Nickel		TWA: 1.5 n	ng/m³		A: 1 mg/m ³		IDLH: 10 mg/m ³
7440-02-0					TWA: 1 mg/m ³		TWA: 0.015 mg/m ³
Chemical name		Alberta		Columbia	Ontario TWAE		Quebec
Lithium Cobalt Oxide	TV	VA: 0.02 mg/m ³	TWA: 0.0	02 mg/m³	TWA: 0.02 mg/	m³	TWA: 0.02 mg/m ³
(CoLiO2)							
12190-79-3							
Graphite	7	ΓWA: 2 mg/m³	TWA: 2	2 mg/m³	TWA: 2 mg/m	3	TWA: 2 mg/m ³
7782-42-5							
Aluminum	Т	WA: 10 mg/m ³	TWA: 1.	0 mg/m ³	TWA: 1 mg/m	3	TWA: 10 mg/m ³
7429-90-5							
Copper	T	WA: 0.2 mg/m ³	TWA: 1	mg/m³	TWA: 0.2 mg/n	n ³	TWA: 0.2 mg/m ³
7440-50-8	1	ΓWA: 1 mg/m³	<u>TWA:</u> 0.	2 mg/m ³	TWA: 1 mg/m	3	TWA: 1 mg/m ³
Carbon black	T	WA: 3.5 mg/m ³	TWA: 3	3 mg/m ³	TWA: 3 mg/m	3	TWA: 3 mg/m ³
1333-86-4							
1,3-Propane sultone			TV	VA:	TWA:		TWA:
1120-71-4							
Nickel	T'	WA: 1.5 mg/m ³	TWA: 0.0	05 mg/m ³	TWA: 1 mg/m	3	TWA: 1.5 mg/m ³
7440-02-0		•		-			

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992). See section 15 for national exposure control parameters.

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.



Skin and body protectionWear suitable 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.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or

smoke when using this product. Wash hands before breaks and immediately after handling

None known

the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical stateSolidAppearanceBlackOdorOdorless

Color No information available Odor Threshold No information available

Property Values Remarks Method

No data available pН None known Melting / freezing point No data available None known Boiling point / boiling range No data available None known No data available **Flash Point** None known **Evaporation Rate** No data available None known Flammability (solid, gas) No data available None known

Flammability Limit in Air

Upper flammability limitNo data availableLower flammability limitNo data available

Vapor pressureNo data availableNone knownVapor densityNo data availableNone knownRelative densityNo data availableNone known

Water Solubility Insoluble in water Solubility(ies) No data available

Partition coefficient: n-octanol/water1

Autoignition temperature

No data available

None known

Other Information

Explosive properties No information available **Oxidizing properties** No information available **Softening Point** No information available No information available **Molecular Weight** No information available **VOC Content (%) Liquid Density** No information available **Bulk Density** No information available **Particle Size** No information available **Particle Size Distribution** No information available

10. STABILITY AND REACTIVITY

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of Hazardous Reactions None under normal processing.



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Conditions to avoid None known based on information supplied.

Incompatible materials None known based on information supplied.

Hazardous Decomposition Products Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Hazardous polymerization does not occur.

Information on likely routes of exposure

Hazardous Polymerization

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.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available. May cause sensitization by

skin contact. (based on components). Repeated or prolonged skin contact may cause

allergic reactions with susceptible persons.

Specific test data for the substance or mixture is not available. Ingestion

Symptoms related to the physical, chemical and toxicological characteristics

Itching. Rashes. Hives. **Symptoms**

Numerical measures of toxicity

Acute toxicity

32.81 % of the mixture consists of ingredient(s) of unknown toxicity Unknown acute toxicity

28.01 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

32.81 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

32.81 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

32.81 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

32.81 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Product Information

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Lithium Cobalt Oxide (CoLiO2)	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 5.05 mg/L (Rat) 4 h
Graphite	•	-	> 2000 mg/m³ (Rat) 4 h
Aluminum	-	-	> 0.888 mg/L (Rat) 4 h
Copper	-	-	> 5.11 mg/L (Rat) 4 h
Carbon black	> 10000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 4.6 mg/m³ (Rat) 4 h
Ethylene carbonate	= 10 g/kg (Rat)	> 26420 mg/kg (Rabbit)	> 730 mg/m³ (Rat) 8 h
1,3-Propane sultone	= 157 mg/kg (Rat)	-	-
Nickel	> 9000 mg/kg (Rat)	-	> 10.2 mg/L (Rat) 1 h

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



Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization May cause sensitization by skin contact.

Germ cell mutagenicity No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for

ingredients. May cause cancer.

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

Chemical name	ACGIH	IARC	NTP	OSHA
Lithium Cobalt Oxide (CoLiO2) 12190-79-3	А3	Group 2B	Reasonably Anticipated	Х
Carbon black 1333-86-4	А3	Group 2B	-	Х
1,3-Propane sultone 1120-71-4	А3	Group 2A	Reasonably Anticipated	X
Nickel 7440-02-0	-	Group 2B	Reasonably Anticipated	Х

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2A - Probably 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.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Graphite	No data available	96h LC50: > 100 mg/L (Danio rerio)	No data available	No data available
Copper	72h EC50: 0.0426 - 0.0535 mg/L (Pseudokirchneriella subcapitata) 96h EC50: 0.031 - 0.054 mg/L	96h LC50: 0.0068 - 0.0156 mg/L (Pimephales promelas) 96h LC50: < 0.3 mg/L (Pimephales promelas) 96h LC50: = 0.2 mg/L	No data available	48h EC50: = 0.03 mg/L (Daphnia magna)



	(Pseudokirchneriella	(Pimephales promelas)		
	subcapitata)	96h LC50: = 0.052 mg/L		
		(Oncorhynchus mykiss)		
		96h LC50: = 1.25 mg/L		
		(Lepomis macrochirus)		
		96h LC50: = 0.3 mg/L		
		(Cyprinus carpio)		
		96h LC50: = 0.8 mg/L		
		(Cyprinus carpio)		
		96h LC50: = 0.112 mg/L		
		(Poecilia reticulata)		
Ethylene carbonate	No data available	96h LC50: > 100 mg/L	No data available	No data available
-		(Oncorhynchus mykiss)		
Nickel	72h EC50: = 0.18 mg/L	96h LC50: > 100 mg/L	No data available	48h EC50: > 100 mg/L
	(Pseudokirchneriella	(Brachydanio rerio)		(Daphnia magna)
	subcapitata)	96h LC50: = 1.3 mg/L		48h EC50: = 1 mg/L
	96h EC50: 0.174 - 0.311	(Cyprinus carpio)		(Daphnia magna)
	mg/L	96h LC50: = 10.4 mg/L		
	(Pseudokirchneriella	(Cyprinus carpio)		
	subcapitata)			

Persistence and Degradability

No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Ethylene carbonate	0.11

MobilityNo information available.Other adverse effectsNo information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products

u

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging

Do not reuse empty containers.

California Waste Codes 141

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 (CoLiO2)	Toxic
12190-79-3	
Aluminum	Ignitable powder
7429-90-5	
Nickel	Toxic powder
7440-02-0	Ignitable powder



14. TRANSPORT INFORMATION

The transportation of primary lithium cells and batteries is regulated by the International Note:

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 shipments 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"

DOT NOT REGULATED

NON-REGULATED **Proper Shipping Name Hazard Class** N/A

Emergency Response Guide 147

Number

Not applicable TDG

Not applicable MEX

Not applicable **ICAO**

IATA

UN-No. UN3480

LITHIUM ION BATTERIES **Proper Shipping Name**

Hazard Class ERG Code

Description UN3480, LITHIUM ION BATTERIES, 9

IMDG/IMO Not applicable

Proper Shipping Name NON-REGULATED PER SP 188

N/A **Hazard Class** EmS-No. F-A, S-I

RID Not applicable

ADR Not applicable

Not applicable ADN

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable



International Inventories

TSCA

DSL/NDSL

Contact supplier for inventory compliance status.

Legend

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

DSL/NDSL - Canadian Domestic 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

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

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 (CoLiO2) - 12190-79-3	12190-79-3	44.97	0.1
Aluminum - 7429-90-5	7429-90-5	5.98	1.0
Copper - 7440-50-8	7440-50-8	5.49	1.0
1,3-Propane sultone - 1120-71-4	1120-71-4	0.47	0.1
Nickel - 7440-02-0	7440-02-0	0.15	0.1

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

CWA (Clean Water Act)

This product contains the following substances 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 7440-50-8		X	Х	
Nickel 7440-02-0		X	Х	

CERCLA

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

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Copper	5000 lb		RQ 5000 lb final RQ
7440-50-8			RQ 2270 kg final RQ



 1,3-Propane sultone
 10 lb
 RQ 10 lb final RQ

 1120-71-4
 RQ 4.54 kg final RQ

 Nickel
 100 lb
 RQ 100 lb final RQ

 7440-02-0
 RQ 45.4 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65		
Carbon black - 1333-86-4	Carcinogen		
1,3-Propane sultone - 1120-71-4	carcinogen, 1/1/1988		
Nickel - 7440-02-0	carcinogen, 10/1/1989 (metallic)		

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	Rhode Island	Illinois
Lithium Cobalt Oxide (CoLiO2) 12190-79-3	X		X	X	X
Graphite 7782-42-5	Х	X	Х		
Aluminum 7429-90-5	Х	Х	Х	Х	
Copper 7440-50-8	Х	Х	Х	Х	Х
Carbon black 1333-86-4	Х	Х	Х		Х
Ethylene carbonate 96-49-1		X	Х		
1,3-Propane sultone 1120-71-4	Х	Х	Х	Х	Х
Nickel 7440-02-0	Х	Х	Х	Х	Х

16. OTHER INFORMATION

NFPA Health hazards 1 Flammability 0 Instability 0 Physical and Chemical Properties -

HMIS Health hazards 0 Flammability 0 Physical hazards 0 Personal Protection X

Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110 1-800-572-6501

 Issuing Date
 17-Mar-2025

 Revision Date
 13-Mar-2025

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

