Issued/Revised date: January 01 2025 Document No.: SDS_Simplo-2507

Explanatory sheet about safety of product for transportation (Safety Data Sheet for transportation)

1. Basic item

Product name Rechargeable Li-ion Battery Pack

UN number: 3480

Product code: Refer to Table 1.

Model name Refer to Table 1.

Manufacturer Name: SIMPLO TECHNOLOGY CO., LTD

Address: No. 471, Sec. 2, Bade Rd., Hu Kou Township, Hsinchu County, 30348, Taiwan

Phone number: +886-3-5695920 Fax number: +886-3-5695931

2. Product information

Basic composition of the product This product is a battery which consists of such main component as core battery pack assembled with some Lithium ion cells. And it consists of any combination of plastic casing, tube casing, protection circuit boards, safety devices and interface terminals.

3. Safety Information

SMP certifies the battery has passed and satisfied the UN Manual of Tests and Criteria Part III, sub-section 38.3 testing in SMP shipping. - SMP manufactured the battery under the quality management program required in UN Model regulations 2.9.4(e).

Battery pack

- 1. The Watt-hour rating of the battery is not more than 100Wh. The Watt-hour rating of the component Lithium ion cells is not more than 20Wh. Refer to Appendix "SDS Simplo-2507".
- 2. Packages of the battery satisfy the following conditions when SMP ships.
 - (a) The package has passed the drop test from the height of 1.2m.
 - (b) The package net weight is not more than 10kg.
 - (c) The package is marked and labeled according to requirement of Packing Instruction 965 Section IB stated in ICAO's and IATA's dangerous goods regulations.
- 3. The battery is not defective for safety reasons, not damaged. It is not collected battery for recycling or disposal.
- 4. The battery is not subject to the fully regulated requirements for Dangerous Goods in ocean and ground transportation.
- 5. The battery should be transported by Cargo aircraft as UN3480, Class 9 Dangerous Goods, and state of charge not exceeding 30%, according to Packing Instruction 965 Section IB stated in ICAO's and IATA's dangerous goods regulations.



Table. 1 Model list of application

Bat	ttery Part Numb	ers		Battery Information					
Lenovo ASM Lenovo PN Part Number	Lenovo FRU Part Number	Lenovo Model Name	MSDS Type #	UN DOT 38.3 Test Certificate	Cell Voltage (V)	Battery Voltage (V)	Watt hour Rating (Wh)	Weight (grams)	Equivalent Lithium Content (grams)
5B10Q62140		L17M2PF1	SDS_Simplo-2507	5B10Q62140_UN38.3	3.80	7.6	30	150	2.4
5B10Q71251		L17M3PB1	SDS_Simplo-2507	5B10Q71251_UN38.3	3.78	11.34	45	150	3.6
5B10Q71253	-	L17M2PB7	SDS_Simplo-2507	5B10Q71253_UN38.3	3.78	7.56	30	136.4	2.4
5B10Q93417		L17M3PG3	SDS_Simplo-2507	5B10Q93417_UN38.3	3.80	11.4	52.5	235	4.149
5B10S73499		L18M4PF0	SDS_Simplo-2507	5B10S73499_UN38.3	3.84	15.36	45	180	3.56
5B10T03402		L18M3PF2	SDS_Simplo-2507	5B10T03402_UN38.3	3.75	11.25	36	155	2.9385
5B10T04975		L18M3PF1	SDS_Simplo-2507	5B10T04975_UN38.3	3.80	11.4	45	220	3.6
5B10T09079		L18M4PF3	SDS_Simplo-2507	5B10T09079_UN38.3	3.84	15.36	45	200	3.558
5B10T09089		L18M3PF8	SDS_Simplo-2507	5B10T09089_UN38.3	3.80	11.4	52.5	220	4.149
5B10T09090		L18M4PF5	SDS_Simplo-2507	5B10T09090_UN38.3	3.80	15.2	70	290	5.532
5B10T09096		L18M3PF6	SDS_Simplo-2507	5B10T09096_UN38.3	3.75	11.25	36	175	2.9385
5B10T09097		L18M3PF7	SDS_Simplo-2507	5B10T09097_UN38.3	3.80	11.4	52.5	220	4.149
5B10T26390	-	L18M3PF9	SDS_Simplo-2507	5B10T26390_UN38.3	3.80	11.4	52.5	220	4.149
5B10T26393		L18M3PF2	SDS_Simplo-2507	5B10T26393_UN38.3	3.75	11.25	36	155	2.952
5B10T30215		L17M3PG3	SDS_Simplo-2507	5B10T30215_UN38.3	3.80	11.4	52.5	220	4.149
5B10U95573		L18M3PFB	SDS_Simplo-2507	5B10U95573_UN38.3	3.84	11.52	42	170	3.33
SB10V25233	5B10V25240	L19M3PF2	SDS_Simplo-2507	SB10V25233_UN38.3	3.84	11.52	57	220	4.455
SB10V25234	5B10V25246	L19M3PF0	SDS_Simplo-2507	SB10V25234_UN38.3	3.75	11.25	36	170	2.952
SB10V25248	5B10V25238	L19M3PF1	SDS_Simplo-2507	SB10V25248_UN38.3	3.80	11.4	45	220	3.6
SB10V27764	5B10V27761	L19M3PD3	SDS_Simplo-2507	SB10V27764_UN38.3	3.84	11.52	56.6	220	5.898
SB10W67172	5B10W67209	L18M4PF5	SDS_Simplo-2507	SB10W67172_UN38.3	3.80	15.2	70	290	5.532
SB10W67186	5B10W67369	L17M3PB0	SDS_Simplo-2507	SB10W67186_UN38.3	3.75	11.25	42	180	3.3615
SB10W67200	5B10W67217	L18M4PF3	SDS_Simplo-2507	SB10W67200_UN38.3	3.80	11.4	52.5	220	4.149
SB10W67210	5B10W67282	L18M3PFB	SDS_Simplo-2507	SB10W67210_UN38.3	3.84	11.52	42	170	3.33
SB10W67259	5B10W67315	L18M4PF0	SDS_Simplo-2507	SB10W67259_UN38.3	3.84	15.36	45	180	3.56
SB10W67265	5B10W67313	L17M3PB1	SDS_Simplo-2507	SB10W67265_UN38.3	3.78	11.34	45	150	3.6
SB10W67268	5B10W67367	L18M3PF2	SDS_Simplo-2507	SB10W67268_UN38.3	3.75	11.25	36	155	2.9385
SB10W67280	5B10W67354	L18M3PF8	SDS_Simplo-2507	SB10W67280_UN38.3	3.80	11.4	52.5	220	4.149
SB10W67304	5B10W67327	L19M3PF2	SDS_Simplo-2507	SB10W67304_UN38.3	3.84	11.52	57	220	4.455
SB10W67311	5B10W67194	L18M4PF3	SDS_Simplo-2507	SB10W67311_UN38.3	3.84	15.36	45	200	3.558
SB10W67373	5B10W67420	L17M3PG3	SDS_Simplo-2507	SB10W67373_UN38.3	3.80	11.4	52.5	235	4.149
SB10W67377	5B10W67261	L19M3PF0	SDS_Simplo-2507	SB10W67377_UN38.3	3.75	11.25	36	170	2.952
SB10W67391	5B10W67341	L17M2PB7	SDS_Simplo-2507	SB10W67391_UN38.3	3.78	7.56	30	136.4	2.4



Table. 1 Model list of application

Battery Part Numbers		Battery Information							
Lenovo ASM Lenovo PN Part Number	Lenovo FRU Part Number	Lenovo Model Name	MSDS Type #	UN DOT 38.3 Test Certificate	Cell Voltage (V)	Battery Voltage (V)	Watt hour Rating (Wh)	Weight (grams)	Equivalent Lithium Content (grams)
SB10W67398	5B10W67250	L18M3PF9	SDS_Simplo-2507	SB10W67398_UN38.3	3.80	11.4	52.5	220	4.149
SB10W67401	5B10W67393	L19M3PD3	SDS_Simplo-2507	SB10W67401_UN38.3	3.84	11.52	56.6	220	5.898
SB10W67406	5B10W67344	L17M2PF1	SDS_Simplo-2507	SB10W67406_UN38.3	3.80	7.6	30	150	2.4
SB10W67407	5B10W67350	L18M3PF1	SDS_Simplo-2507	SB10W67407_UN38.3	3.80	11.4	45	220	3.6
SB10W67411	5B10W67364	L19M3PF1	SDS_Simplo-2507	SB10W67411_UN38.3	3.80	11.4	45	220	3.6
SB10W69463	5B10W69464	L17M3PG3	SDS_Simplo-2507	SB10W69463_UN38.3	3.80	11.4	52.5	220	4.149
SB10W86198	5B10W86192	L19M4PC1	SDS_Simplo-2507	SB10W86198_UN38.3	3.84	15.36	80	220	6.42
SB10W86199	5B10W86188	L19M4PC2	SDS_Simplo-2507	SB10W86199_UN38.3	3.84	15.36	80	220	6.42
SB10W89840	5B10W89843	L19M3PF7	SDS_Simplo-2507	SB10W89840_UN38.3	3.80	11.4	45	222	3.564
SB10X55573	5B10X55569	L19M3PF9	SDS_Simplo-2507	SB10X55573_UN38.3	3.78	11.34	45	222	3.6
SB11B48828	5B11B48825	L20M4PC1	SDS_Simplo-2507	SB11B48828_UN38.3	3.84	15.36	83	328	6.252
SB11B53884	5B11B53885	L20M4PC2	SDS_Simplo-2507	SB11B53884_UN38.3	3.84	15.36	83	329	6.252
SB11B96717	5B11B96718	L20M3PC2	SDS_Simplo-2507	SB11B96717_UN38.3	3.84	11.52	45	189	3.519
SB11C22841	5B11C22842	L20M4PDB	SDS_Simplo-2507	SB11C22841_UN38.3	3.84	15.36	60	230	4.722
SB11C66149	5B11C66148	L20M4PF2	SDS_Simplo-2507	SB11C66149_UN38.3	3.86	7.72	61	235	4.74
SB11F29410	5B11F29414	L21M4PE2	SDS_Simplo-2507	SB11F29410_UN38.3	3.88	15.52	59	232	4.644
SB11F36368	5B11F36373	L21M4PC4	SDS_Simplo-2507	SB11F36368_UN38.3	3.84	15.36	71	308	5.61
SB11K38741	5B11K38740	L22M4PC2	SDS_Simplo-2507	SB11K38741_UN38.3	3.86	15.44	80	336	6.414
SB11K38952	5B11K38959	L22M4PC0	SDS_Simplo-2507	SB11K38952_UN38.3	3.86	15.44	80	341	6.414
SB11L93200	5B11L93199	L22M4PE1	SDS_Simplo-2507	SB11L93200_UN38.3	3.84	15.36	71	275	5.45
SB11M64607	5B11M64613	L23M4PK5	SDS_Simplo-2507	SB11M64607_UN38.3	3.86	15.44	80	336	6.414
SB11N42050	5B11N42049	L23M4PF2	SDS_Simplo-2507	SB11N42050_UN38.3	3.87	7.74	70	257	5.316
SB11N45403	5B11N45429	L22M4PC2	SDS_Simplo-2507	SB11N45403_UN38.3	3.86	15.44	80	336	6.414
SB11N45408	5B11N45419	L22M4PC0	SDS_Simplo-2507	SB11N45408_UN38.3	3.86	15.44	80	341	6.414
SB11N47471	5B11N47499	L21M4PE2	SDS_Simplo-2507	SB11N47471_UN38.3	3.88	15.52	59	232	4.644
SB11N47477	5B11N47479	L22M4PE1	SDS_Simplo-2507	SB11N47477_UN38.3	3.84	15.36	71	275	5.45
SB11N52068	5B11N52056	L20M4PDB	SDS_Simplo-2507	SB11N52068_UN38.3	3.84	15.36	60	230	4.722
SB11P72758	5B11P72759	L23M4PH1	SDS_Simplo-2507	SB11P72758_UN38.3	3.85	7.7	75	245	5.8452
SB10K97646	02DL008	L18M3P73	SDS_Simplo-2507	SB10K97646_UN38.3	3.84	11.52	51	200	3.942
SB10K97656	02DL018	L18M6PD2	SDS_Simplo-2507	SB10K97656_UN38.3	3.80	11.4	48	225	3.798
SB10T83119	02DL030	L18M4P90	SDS_Simplo-2507	SB10T83119_UN38.3	3.84	15.36	46	180	3.6
SB10V03234	02HM886	L19M3P71	SDS_Simplo-2507	SB10V03234_UN38.3	3.84	11.52	50	200	3.942
SB10T83124	5B10W13881	L19M4PG1	SDS_Simplo-2507	SB10T83124_UN38.3	3.84	15.36	46	190	3.6



Table. 1 Model list of application

Battery Part Numbers		Battery Information							
Lenovo ASM Lenovo PN Part Number	Lenovo FRU Part Number	Lenovo Model Name	MSDS Type #	UN DOT 38.3 Test Certificate	Cell Voltage (V)	Battery Voltage (V)	Watt hour Rating (Wh)	Weight (grams)	Equivalent Lithium Content (grams)
SB10T83149	5B10W13906	L18M3P73	SDS_Simplo-2507	SB10T83149_UN38.3	3.84	11.52	51	200	3.942
SB10T83167	5B10W13924	L18M6PD2	SDS_Simplo-2507	SB10T83167_UN38.3	3.80	11.4	48	225	3.798
SB10T83172	5B10W13929	L19M3P71	SDS_Simplo-2507	SB10T83172_UN38.3	3.84	11.52	50	200	3.942
SB10T83176	5B10W13933	L18M4P90	SDS_Simplo-2507	SB10T83176_UN38.3	3.84	15.36	46	180	3.6
SB10W51915	5B10W51814	L20M4P72	SDS_Simplo-2507	SB10W51915_UN38.3	3.84	15.36	57	230	4.3236
SB10W51926	5B10W51827	L18M3P73	SDS_Simplo-2507	SB10W51926_UN38.3	3.84	11.52	51	200	3.942
SB10W51941	5B10W51842	L18M6PD2	SDS_Simplo-2507	SB10W51941_UN38.3	3.80	11.4	48	225	3.798
SB10W51949	5B10W51848	L21M4PG1	SDS_Simplo-2507	SB10W51949_UN38.3	3.84	15.36	46	182	3.6
SB10W51972	5B10W51871	L21M4P74	SDS_Simplo-2507	SB10W51972_UN38.3	3.86	15.44	86	320	6.684
SB11H56235	5B11H56334	L21M4PG1	SDS_Simplo-2507	SB11H56235_UN38.3	3.84	15.36	46	182	3.6
SB11H56302	5B11H56401	L23M3P73	SDS_Simplo-2507	SB11H56302_UN38.3	3.87	11.61	75	268	5.6979
SB11H56304	5B11H56403	L23M3P74	SDS_Simplo-2507	SB11H56304_UN38.3	3.87	11.61	58.05	222	4.41
SB11H56324	5B11H56423	L21M4PG1	SDS_Simplo-2507	SB11H56324_UN38.3	3.84	15.36	46	182	3.6
SB11M89838	5B11M90037	L21M4P74	SDS_Simplo-2507	SB11M89838_UN38.3	3.86	15.44	86	320	6.684
SB11Q02052	5B11Q01975	L24M4PK4	SDS_Simplo-2507	SB11Q02052_UN38.3	3.90	15.6	54.7	195	4.212
SB11Q02007	5B11Q02060	L24M4PK5	SDS_Simplo-2507	SB11Q02007_UN38.3	3.87	15.48	70	252	5.43
SB11Q41111	5B11Q41110	L24M3PK8	SDS_Simplo-2507	SB11Q41111_UN38.3	3.90	11.7	55.5	205	4.32
SB11Q26810	5B11Q26808	L24M4PK7	SDS_Simplo-2507	SB11Q26810_UN38.3	3.90	15.6	54.7	195	4.212
SB11Q37249	5B11Q37248	L24M3PG2	SDS_Simplo-2507	SB11Q37249_UN38.3	3.77	11.31	47	184	3.7602
SB11Q46567	5B11Q46568	L24M4PH1	SDS_Simplo-2507	SB11Q46567_UN38.3	3.90	15.6	88	243	6.84
SB11Q46782	5B11Q46783	L24M4PH2	SDS_Simplo-2507	SB11Q46782_UN38.3	15.6	7.7	75	247	5.928
SB11M89921	5B11M90120	L24M3P76	SDS_Simplo-2507	SB11M89921_UN38.3	3.87	11.61	75	268	5.814
SB11R07660	5B11R07661	L24M4PK9	SDS_Simplo-2507		3.90	15.60	74	260	5.76
SB11Q73051	5B11Q73057	L24M3PG3	SDS_Simplo-2507	SB11Q73051_UN38.3	3.83	11.49	48	185	3.8187
SB11M89936	5B11M90135	L24M4P73	SDS_Simplo-2507		3.90	15.60	99.9	345	7.6932



SAFETY DATA SHEET

Issued/Revised date: January 01 2025 Document No.: SDS_Simplo-2507

1. Product and Company Identification

Product Name	, , , , ,	Rechargeable Lithium ion battery cell
Product code		All Polymer models BYD manufactured
Cell manufacturers		BYD Company limited
Details of the supplier	of the produc	
	Name	SIMPLO TECHNOLOGY CO., LTD.
	Address	No. 471, Sec. 2, Bade Rd., Hu Kou Township, Hsinchu
Company (Taiwan)	radioss	County, 30348, Taiwan
	Telephone	+886-3-5695920
	Fax	+886-3-5695931
	Name	SIMPLO TECHNOLOGY(CHANGSHU)INC.
Magneta atomag (Chan ashu)	Address	No.888 Dong Nan Avenue, Chang Shu, Jiang Su Province, China
Manufacturer (Changshu)	Telephone	+86-512-52302255
	Fax\	+86-512-52302277
	Name\	SIMPLO TECHNOLOGY(CHONGQING) INC
M. C. (Cl. ')	Address	NO.2 Zongbao Avenue Shapingba District, Chongqing China
Manufacturer (Chongqing)	Telephone	+86-23-61718899
	Fax	+86-23-61710488
	Name	HUAPU TECHNOLOGY(CHANGSHU)INC.
M C (II	Address	No.888 Dong Nan Avenue, Chang Shu, Jiang Su Province, China
Manufacturer (Huapu)	Telephone	+86-0512-52302255
	Fax	+86- 0512-52302277
	Name	SIMPLO TECHNOLOGY (VIETNAM) CO., LTD
Manufaatuunu (VIETNAM)	A ddmaga	Lot CNSG-07, Van Trung Industrial Park, Van Trung Commune,
Manufacturer (VIETNAM)	Address	Viet Yen District, Bac Giang Province, Vietnam
	Telephone	+84-204-3688802
Emergency phone nun	nber: +886-3-	5695920



2.Hazard(s) identification

The battery is considered as an Tarticle J The product is outside of the scope of GHS system

	T
	When the battery is in extreme pressure deformation,
	high-temperature environment, overload,
Main Hazards	short-circuit condition, or disassemble the battery, an
	explosion of fire and chemical burn hazards may
	occur.
	Contact with the electrolyte of battery may be irritating to
Health Heavel	skin. eyes and mucous membranes. Fire will produce
Health Hazards	irritating corrosive and/or toxic gases. Fumes may cause
	dizziness or suffocation
	Do not dismantle, open or shred the battery, the
Description of any hazards not otherwise classified	ingredients contained within could be harmful.
Ingredient with unknown acute toxicity	No information available.

3. Composition / Identification on Ingredients

Mixtures information: ingredients contained within the battery

Hazardous Ingredients	%	CAS Number
Lithium Cobalt Oxide	35-45	12190-79-3
PVDF	0.4-2.0	24937-79-9
CNT	0.1-3	7440-44-0
Carbon	15-25	7440-44-0
PTFE	0.4-2.0	9002-84-0
Electrolyte (EC/DEC/EMC/LiPF6)	10-20	96-49-1 105-58-8 2485-62-3 21324-40-3
Additive(VC)	0.6-0.9	872-36-6
PE	1-5	-
PP	0.3-2.0	-
Copper	5-15	7440-50-8

4. First Aid Measures

(a) Description of first aid measures



Caution! No effect under routine handling and use. If exposure to internal materials within cell due to damaged outer metal casing, the following actions are recommended.

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if you feel unwell.
Skin contact:	Immediately flush skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing and shoes before reuse. Get medical aid.
Eye contact:	Rinse cautiously with water for 15-20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Ingestion	Swallowing battery will be damaged to the respiratory tract and cause chemical burns to the stomach; in serious conditions it will cause Permanent damage.

(b) Most important symptoms/effects, acute and delayed

No effect under routine handling and use

(c) Immediate medical attention and special treatment

Note to physicians: Treat symptomatically and supportively.

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	Product is or contains a sensitizer. May cause sensitization by skin contact.		
Hazardous Combustion Products	Carbon oxides.		
Explosion Data	Sensitivity to Mechanical Impact: No. Sensitivity to Static Discharge: No.		
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

Demonstrative againment and	Personal Precautions: Avoid contact with skin, eyes
Personal precautions, protective equipment and	or clothing. Ensure adequate ventilation. Use
emergency procedures	personal protective equipment as required. Evacuate



	personnel to safe areas.
	Methods for Containment: Prevent further leakage or
Methods and materials for containment and cleaning	spillage if safe to do so.
up	Methods for cleaning up: Pick up and transfer to
	properly labeled containers.

7. Handling and Storage

7. Handing and Storage			
	Do not expose the battery to excessive physical		
	shock or vibration. Short-circuiting should be		
	avoided. However, accidental short-circuiting for a		
	few seconds will not seriously affect the battery.		
	Prolonged short circuits will cause the battery to		
	rapidly lose energy, could generate enough heat to		
	burn skin. Sources of short circuits include jumbled		
	batteries in bulk containers, coins, metal jewelry,		
Precautions for safe handling	metal covered tables, or metal belts used for		
	assembly of batteries in devices. To minimize risk of		
	short-circuiting, the protective case supplied with th		
	battery should be used to cover the terminals when		
	transporting or storing the battery. Do not		
	disassemble or deform the battery. Should an		
	individual cell within a battery become ruptured, do		
	not allow contact with water.		
	The lithium ion battery should be between 25% and 75%		
Conditions for sofe storage including and	of full charge when stored for a long period of time.		
Conditions for safe storage, including any	Stored in a cool, dry, and well-ventilated area. Elevated		
incompatibilities	temperatures can result in loss of battery performance,		
	leakage, or rust. Do not expose the battery to open flames.		



8. Exposure Controls / Personal Protection

Appropriate Engineering Controls	Choose the suitable ventilation equipment; provide sufficient quantity of fire extinguishers, gas mask and water; equip with metal storage containers and bathing equipment
Respirator Protection	If toxic gases or fumes are present when handling a battery leak, wear appropriate respiratory protection (such as a gas mask).
Eye/Face Protection	Avoid contact with leaking liquid in the eyes; wear safety goggles if necessary.
Skin Protection	Hand protection: Wear safety gloves Foot Protection: Steel toed shoes recommended for large container handling Body protection: Wear appropriate protective clothing
Other Protection	No smoking, drinking and eating at working site, Wash thoroughly after handling

9. Physical and Chemical Properties

	Physical state	Solid	
	Appearance	Black Plastics or Mylar film shell	
Physical Properties	Color	Black	
	Odor	Odorless	
	Odor Threshold	No information available	
Chemical Properties:			
Property	Values	Remarks/ Method	
рН	No data available	None known	
Melting / freezing point	No data available	None known	
Boiling point / boiling range	No data available	None known	
Flash Point	No data available	None known	
Evaporation Rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limit in Air	No data available	-	
Upper/ Lower flammability	110 data available		
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 noctanol/water:	No data available	None known
Autoignition temperature	130°C	None known
Decomposition 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

10. Stability and Reactivity

Reactivity None during normal operating or handling co	
	It is stable under normal operating conditions, but
Chamical stability	damage to the casing, overcharging, or over
Chemical stability	discharging may lead to thermal runaway, causing
	fire or explosion.
Possibility of Hazardous Reactions	None under normal processing
Hazardous reaction	It may react violently when in contact with water or
Trazardous reaction	moisture.
	Avoid high temperatures, moisture, extreme
Conditions to avoid	mechanical pressure, or excessive charging and
	discharging.
Incompatible materials	Strong acids. Strong oxidizing agents. Strong bases.
Hazardous Decomposition Products	Carbon oxides.

11. Toxicological Information

(a) Information on the likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or
Product information	supplied information. In case of rupture
Inhalation	No effect under routine handling and use for sealed battery. If
	battery is broken, inhale fume/dust may cause irritation, chemical



	burns or lung edema.
	Specific test data for the substance or mixture is not available.
Eve Contact	Expected to be an irritant based on components. Irritating to eyes.
Eye Contact	May cause redness, itching, and pain. May cause temporary eye
	irritation.
	Specific test data for the substance or mixture is not available.
Skin Contact	Expected to be an irritant based on components. Irritating to skin.
	Prolonged contact may cause redness and irritation.
	Specific test data for the substance or mixture is not available.
Ingestion	Ingestion may cause irritation to mucous membranes. Ingestion may
	cause gastrointestinal irritation, nausea, vomiting and diarrhea.

(b) Information on toxicological characteristics This product does not elicit toxicological properties during routine handling and use. If the cells are opened

through misuse or damage, discard immediately. Internal components of cell are irritants and sensitizers.

Through impuse of damage, diseard immediate	ery. Internal components of centare firstants and sensitizers.
Acute Toxicity	No information available.
Skin corrosion/irritation	No information available.
Serious eye damage/irritation:	No information available.
Respiratory sensitization	No information available.
skin sensitization	No information available.
Carcinogenicity	No information available.
Germ Cell Mutagenicity	No information available.
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	No information available.
Persistence and Degradability	No information available.
Bioaccumulations Potential	No information available.
Mobility in soil	No information available.
Other adverse effects	No information available.



13. Disposal Consideration

(a) Disposal methods

Disposal methods: This material, as supplied, is not a hazardous waste according to Federal regulations (40CFR 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.

(b) Contaminated Packaging Dispose of in accordance with federal, state and local regulations.

14. Transport Information

(a) Only Lithium Battery During: This report applies to by land, by air by sea.

	The product has passed the test items of UN model regulations, manual of
	test and Criteria Section 38.3 and UN model regulation SP188 1.2m drop
Transport	test and to that each package prepared in accordance with PI 965 Section
•	IB must be capable of withstanding the 3m stack test as applies to limited
	quantity packages. The total net weight of the Lithium batteries is less than
	10 kg
	The product is not subject to RID/ADR according to special provision 188
	According to 2.2.9.1.7 (g) of RID/ADR (2025 Edition), Manufacturers and
RID /ADR (2025 Edition)	subsequent distributors of cells or batteries manufactured shall make
	available the test summary as specified in the Manual of Tests and Criteria
	Part III. sub-section 38.3 paragraph 38.3.5
	UN3480
	Hazard Class 9
	The product shall meet the General Requirements and section IB of
	Packaging Instruction 965 According to 3.9.2.6.1(g) of IATA DGR (66th
	Edition), Manufacturers and subsequent distributors of cells or batteries
	manufactured after 30 June 2003 shall make available the test summary as
IATA DGR (66th Edition):	specified in the Manual of tests and Criteria Part III, sub-section 38.3
	paragraph 38.3.5.
	The International Civil Aviation Organization (ICAO) Technical
	Instructions Packing instruction 965 section IB (2025-2026 Edition)
	Lithium-ion batteries according to the PI965 Section IB transport listed in
	this report must be offered for transport at a state of charge (SoC) not
	exceeding 30% of their rated capacity.



	Special provision 188 of the 《International Maritime Dangerous Goods
	(IMDG) Code (Amendment 42-24Edition)
IMO IMDC CODE (2024 Edition)	Distributors of cells or batteries manufactured shall make available the test
	summary as specified in the Manual of Tests and Criteria, Part III, sub-
	section 38.3 paragraph 38.3.5

(b) Test results of the UN Recommendation on the Transport of Dangerous Goods

Manual of Test and Criteria (38.3 Lithium battery)			
No	Test item	Test Results	Remark
T1	Altitude Simulation	Pass	
T2	Thermal Test	Pass	
Т3	Vibration	Pass	
T4	Shock	Pass	
T5	External Short Circuit	Pass	
Т6	Impact/Crush	Pass	
T7	Overcharge	Pass	
Т8	Forced Discharge	Pass	

(c) UN regulation

UN3480	Batteries only, IATA Dangerous Goods Regulations, packing instruction 965 Section IB.	
UN3481	Lithium ion batteries packed with equipment, IATA Dangerous Goods Regulations, packing instruction 966 Section II	
UN3481	Lithium ion batteries contained in equipment, IATA Dangerous Goods Regulations, packing instruction 967 Section II.	

15. Regulatory Information

(a) Applicable regulations

Dangerous Goods Regulations

IMO International Maritime Dangerous Goods Code relevant regulations

Refer to U. N., national, local regulations.

(b) Waste disposal requirements

Battery labeling, disposal, and recycling should comply with the requirements of the EU Battery Regulation (EU) 2023/1542.

The battery pack should be recycled and processed by a professional organization.



16. Other Information

(a) Preparation and revision information

The information contained in this Safety data sheet is based on the present state of knowledge and current legislation.

This safety data sheet provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The information contained in this Safety data sheet is based on the present state of knowledge and current legislation

(b) Abbreviations and acronyms

•
American Conference of Governmental Industrial Hygienists
The United States Occupational Safety and Health Administration.
Globally Harmonized System of Classification and Labelling of Chemicals
Chemical Abstracts Service
US Department of Transportation
Regulation for rail International transportation
European Agreement concerning the International Carriage of Dangerous Goods by
Road
International Maritime Organization, International Maritime Dangerous Goods Code
International Civil Aviation Organization
International Air Transport Association
Packaging Instruction
Toxic Substances Control Act, The American chemical inventory.
Inventory of existing chemical substances in China.

(c) Disclaimer

The information in this SDS is provided all the relevant data fully and truly. However, the information is provided without any warranty on their absolute extensiveness and accuracy. This SDS was prepared to provide safety preventive measures for the users who have got professional training. The personal user who obtained this SDS should make independent judgment for the applicability of this SDS under special conditions. In these special cases, we do not assume responsibility for the damage.

 End	of	the	SDS	