

MSDS Report

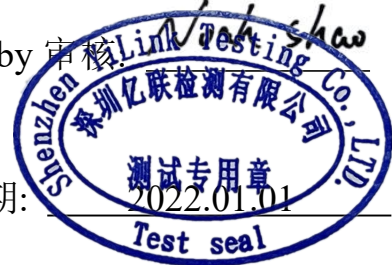
Applicant: 申请商:	Therabody, Inc. 6100 Wilshire Blvd. Suite 200 Los Angeles, CA 90048-5107, USA
Factory: 生产单位:	Dongguan Large Electronics Co., Ltd. 东莞市钜大电子有限公司 No. 8 Jingyi Road, Dongcheng District, Dongguan City, Guangdong Province, China 广东省东莞市东城街道景怡路 8 号
Product Name: 产品名称:	Rechargeable Li-ion Battery Pack 二次锂离子电池组
Model 型号:	01WQ0087-01
Inspection according to 鉴定依据	UN "Recommendations on the TRANSPORT OF DANGEROUS GOODS" 联合国《关于危险品货物运输的建议书》
Prepared By : 编制单位:	Shenzhen Yilink Testing Co., LTD. 深圳亿联检测有限公司 Room 1406, Building A, Meixun Science Park, No.19 Jinxiu Middle Road, Laokeng Community, Longtian Street, Pingshan District, Shenzhen 深圳市坪山区龙田街道老坑社区锦绣中路 19 号美讯数码科技 厂区 1 号厂房 1406
Report No. 报告编号:	YL211253008-01

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Date 日期: 2022.01.01



Material Safety Data Sheet

化学品安全技术说明书

1. Identification of the product and supplier (产品和厂商信息)	
Product Name: 产品名称:	Rechargeable Li-ion Battery Pack 二次锂离子电池组
Model: 型号:	01WQ0087-01
Rating: 规格:	10.8V, 5100mAh, 55.08Wh
Weight: 重量:	303.0g
Physical shape: 样品形状:	Prismatic 棱柱形
Factory: 生产单位:	Dongguan Large Electronics Co., Ltd. 东莞市钜大电子有限公司
Factory address: 生产单位地址:	No. 8 Jingyi Road, Dongcheng District, Dongguan City, Guangdong Province, China 广东省东莞市东城街道景怡路 8 号
Emergency telephone call: 紧急联系电话:	+86-769-22810105
E-mail: 邮箱:	--

2. Composition/Information on Ingredients (成分/组成信息)

Chemical Name 化学名称	Concentration or concentration ranges (%) 浓度或浓度范围(%)	CAS Number CAS 号 (化学文摘索引登记号)
Lithium Cobalt Oxide 钴酸锂	12.5-13.5	12190-79-3
Lithium Manganese Oxide 锰酸锂	12.5-13.5	12057-17-9
Nickelous Oxide 氧化镍	12.5-13.5	1314-06-3
Polyvinylidene Fluoride (PVDF) 聚偏氟乙烯	0.5-1.5	24937-79-9
Aluminum 铝	3.0-4.0	7429-90-5
Carbon 碳	17.0-19.0	7440-44-0
Styrene Butadiene Rubber (SBR) 丁苯橡胶	<1	9003-55-8
Carboxymethylcellulose 羧甲基纤维素钠	<1	9004-32-4
Copper 铜	6.5-7.5	7440-50-8
Polypropylene 聚乙烯	3.5-4.5	9002-88-4
Lithium Hexafluorophosphate 六氟磷酸锂	11.0-14.0	21324-40-3
Ethyl Methyl Carbonate 碳酸甲乙酯		623-53-0
Iron 铁	9.0-10.5	7439-89-6
Nickel 镍	0.75-1.25	7440-02-0

3. Hazards Identification (危险性概述)

Hazard Description 危险性描述	Not dangerous with normal use. Do not dismantle, open or shred the battery ingredients contained within or their ingredients products could be harmful. 正常使用没有危险，不能拆解、打开或分解电池，里面的材料或成分是有危害的。
Primary Route(s) of Exposure 接触途径	Inhalation, Ingestion, Skin contact and Eye contact. 吸入、食入、皮肤接触、眼睛接触。
Potential Health Effects 潜在健康影响	Inhalation: Vapors or mists from a ruptured battery may cause respiratory irritation. 吸入: 破裂的电池散发出来的气雾会引起呼吸道刺激。 Ingestion: The battery ingredients contained within or their ingredients products can cause serious chemical burns of mouth, esophagus, and gastrointestinal tract.

	<p>食入: 电池的组成成分或原料可以导致嘴, 食道和胃肠道的严重化学烧伤。</p> <p>Skin: Skin contact with contents of an open battery can cause severe irritation or burns to the skin.</p> <p>皮肤: 皮肤接触到电池的内部化学材料可能会导致严重的刺激或烧伤皮肤。</p> <p>Eye: Eye contact with contents of an open battery can cause severe irritation or burns to the eye.</p> <p>眼睛: 眼睛接触到电池的内部化学材料可能会导致严重的刺激或烧伤眼睛。</p>
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4. First Aid Measures (急救措施)

Inhalation 吸入	Remove source of contamination or move victim to fresh air. Obtain medical advice. 移除污染源或者将受害者移至新鲜空气处。寻求医生建议。
Ingestion 食入	Please rinse mouth thoroughly with water. Induce vomiting under the guidance of professional personage. Please seek medical treatment in time. 立即用清水漱口, 在专业人士的指导下催吐, 速就医。
Skin contact 皮肤接触	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid. 脱下已污染衣服, 用大量的水冲洗至少 15 分钟, 速就医。
Eye contact 眼睛接触	Irrigate with flowing water for 15 minutes. If irritation persists, consult a physician. 用流动水冲洗 15 分钟, 如刺激持续发生, 请求助于医生。

5. Fire Fighting Measures (消防措施)

Characteristics of Hazard 危险特性	Toxic fumes, gases or vapors may evolve on burning. 火灾时可释放有害浓烟、气体或者蒸汽。
Hazardous Combustion Products 燃烧产生的危险物品	Carbon monoxide, carbon dioxide, lithium oxide fumes and so on. 一氧化碳, 二氧化碳, 锂氧化物烟气等。
Fire-extinguishing Methods and Extinguishing Media 灭火方法及灭火剂	Please use water, dry sand and other proper fire extinguishing media. 请使用水, 干燥沙等合适的灭火介质。

Attention in Fire-extinguishing 灭火注意事项	The firemen should put on antigas masks and full fire-fighting suits. 消防人员须佩戴防毒面具、穿全身消防服。
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6. Accidental Release Measures (泄露应急处理)

Personal Precautions, protective equipment, and emergency procedures 个人预防措施、防护装备和应急程序	Restrict access to area until completion of clean-up. Do not touch the spilled material. Wear adequate personal protective equipment as indicated in Section 8. 限制区域，直到完成清理工作。请勿触摸泄漏的材料。穿戴适当的个人防护设备，如第 8 部分所示。
Environmental Precautions 环境保护措施	Prevent material from contaminating soil and from entering sewers or waterways. 防止物质污染土壤和进入下水道或水道。
Methods and materials for cleaning up 清理的方法和材料	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. 用惰性吸收剂(干砂或沙土)吸收溢出的材料。污染物转移到可吸收废物的容器。收集所有受污染的吸收剂和根据第 13 部分的指令处置。用洗涤剂和水清洁污染区域，收集所有受污染的洗涤水进行适当处置。

7. Handling and Storage (操作处置与储存)

Handling 操作	Don't handling the batteries in manner that allows terminals to short circuit. Do not open, disassemble, crush or burn battery. 不要以让接头短路的方式对电池进行操作。不要打开，分解，挤压或燃烧电池。
Storage 储存	If the battery is subject to storage for such a long term as more than 3 months, it is recommended to recharge the battery periodically. 如果电池长期存放超过 3 个月，建议定期对电池充电。 Long period storage: -10°C ~ 35°C, 60±25%R.H 长期存储: -10°C ~ 35°C, 相对湿度 60±25% Do not storage the battery haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects. 不要将电池随意丢在盒子或抽屉里，以免电池之间或电池与其他金属物质发生短路。 Keep out of reach of children. 储存在小孩接触不到的地方。 Do not expose the battery to heat or fire. Avoid storage in direct sunlight. 不要将电池暴露在火源和热源附近，避免在阳光直射下存储。

	Do not store together with oxidizing and acidic materials. 不要与氧化和酸性物质存储在一起。
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8. Exposure Controls/Personal Protection (接触控制和个体防护)

Engineering Controls 工程控制	No engineering controls are required for handling batteries that have not been damaged. Personal protective equipments for damaged batteries should include chemical resistant gloves and safety glasses. 操作未破损的电池，没有工程控制要求。对于破损的电池，个人防护用品应包括化学品防护手套和安全眼镜。
Personal Protective Equipment 个人防护设备	<p>Respiratory Protection: In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Respiratory Protection is not necessary under conditions of normal use. Not necessary under conditions of normal use. 呼吸保护：当电池排气阀打开时，应尽量使通风设备开至最大，避免将打开排气阀的电芯局限在某一狭窄空间内。正常操作条件下，呼吸保护是不必要的。正常使用条件下不必考虑。</p> <p>Protective Gloves: Not necessary under conditions of normal use. 防护手套：正常使用条件下不必考虑。</p> <p>Other Protective Clothing or Equipment: Not necessary under conditions of normal use. 其他防护服装或设备：正常使用条件下不必考虑。</p> <p>Personal Protection is recommended for venting battery: Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields. 当电池排气阀打开时，应做好个人防护：呼吸防护，防护手套，防护服装和有护边的安全玻璃罩都是要准备的。</p>

9. Physical and Chemical Properties (物理和化学特性)

Physical State 物理状态	Form: Solid 形态：固体
	Color: Blue 颜色：蓝色
	Odour: Odorless 气味：无气味
pH 酸碱度	Not applicable as supplied 不适用
Flash Point 燃点	Not applicable unless individual components exposed 除单个电芯暴露试验外其他不适用
Flammability	Not applicable unless individual components exposed

可燃性	除单个电芯暴露试验外其他不适用
Relative density 相对密度	Not applicable unless individual components exposed 除单个电芯暴露试验外其他不适用
Solubility (water) 溶解性 (水溶性)	Not applicable unless individual components exposed 除单个电芯暴露试验外其他不适用
Solubility (other) 溶解性 (其他)	Not applicable unless individual components exposed 除单个电芯暴露试验外其他不适用
Vapor Density: (Air = 1) 蒸汽密度: (空气=1)	Not applicable unless individual components exposed 除单个电芯暴露试验外其他不适用
Density/relative density 密度/相对密度	Not applicable unless individual components exposed 除单个电芯暴露试验外其他不适用
Solubility in Water 水溶性	Not applicable unless individual components exposed 除单个电芯暴露试验外其他不适用

10. Stability and Reactivity (稳定性和反应性)

Stability 稳定性	Stable under normal temperatures and pressures. 常温常压下稳定。
Conditions to Avoid 应避免的条件	Heat above 70°C or Incinerate, Deform, Mutilate, Crush, Disassemble, Overcharge, Short circuit, Expose over a long period to humid conditions. 加热 70°C 以上或焚烧、变形、毁坏、粉碎、拆卸、过充电、短路, 长时间暴露在潮湿的条件下。
Hazardous Decomposition Products 危害分解物	Toxic Fumes, and may form peroxides. 有毒烟雾, 并可能形成过氧化物。
Possibility of Hazardous Reaction 危险反应的可能性	If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalis, halogenated hydrocarbons. 如果发生泄露, 避免与强氧化剂, 无机酸, 强碱, 卤代烃接触。

11. Toxicological Information (毒理学信息)

Irritation 刺激	In the event of exposure to internal contents, vapor fumes may be very irritating to the eyes and skin. 内部物质暴露的情况下, 蒸汽烟雾可能对眼睛和皮肤产生刺激性。
Sensitization 致敏	No data is available 无数据可提供
Reproductive Toxicity 再生毒性	No data is available 无数据可提供

Toxicologically Synergistic Materials 协同材料毒理学	No data is available 无数据可提供
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12. Ecological Information (生态学信息)

General note 通用信息	Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. 不允许未稀释或大量的产品到达地下水、水道或污水系统。
Anticipated behavior of a chemical product in environment/possible environmental impact/ecotoxicity 化学产品在环境/可能的环境预期的行为的一种生态毒性	No data is available 无数据可提供
Mobility in soil 土壤中移动性	No data is available 无数据可提供
Persistence and Degradability 持久性和降解性	No data is available 无数据可提供

13. Disposal Considerations (废弃处置)

Waste Treatment 废弃处置方法	Recycle or dispose of in accordance with government, state & local regulations. 建议遵照国家和地方法规处置或再利用。
Attention for Waste Treatment 废弃注意事项	Deserted batteries couldn't be treated as ordinary trash. Couldn't be thrown into fire or placed in high temperature. Couldn't be dissected, pierced, crushed or treated similarly. Best way is recycling. 废电池不能被当做普通垃圾。不能扔进火中或置于高温下。不能解体, 刺穿, 破碎或类似的处理。最好的办法是回收利用。

14. Transport Information (运输信息)	
Label for conveyance 运输标签	Lithium Battery Mark 锂电池操作标签
UN Number UN 编号	UN3480 or UN3481 UN3480 或 UN3481
Packing Group 包装等级	N/A 不适用
EmS No EmS 编号	F-A, S-I
Marine pollutant(Y/N) 海洋污染物 (Y / N)	N
Proper Shipping name 正确的装运名称	1) Lithium ion batteries; 2) Lithium ion batteries packed with equipment; 3) Lithium ion batteries contained in equipment. (including Lithium ion polymer batteries) 1) 锂离子电池; 2) 锂离子电池伴随设备包装在一起 3) 锂离子电池装在设备中 (包括锂离子聚合物电池)
Hazard Classification 危险分类	The goods shall be complied with the requirements of Section II (or Section IB) of Packing Instructions 965~967 of 63 rd DGR Manual of IATA (2022 Edition) and Special Provision 188 of IMDG CODE (Amdt. 40-20), including the passing of the UN38.3 test. 货物应遵守 IATA 第 63 版 DGR 手册包装说明 965-967 第 II 节(或者 IB 节)规定(2022 年版), 和特殊规定 188 海运危险货物规则(Amdt. 40-20), 包括通过 UN38.3 测试手册要求。

15. Regulatory Information (法规信息)

《Dangerous Goods Regulations》
 《危险物品规则》
 《Recommendations on the Transport of Dangerous Goods Model Regulations》
 《危险货物运输的建议模型规定》
 《International Maritime Dangerous Goods》
 《国际海上危险货物运输》
 《Technical Instructions for the Safe Transport of Dangerous Goods》
 《危险货物安全运输技术指南》
 《Classification and code of dangerous goods》
 《危险货物分类与代码》
 《Occupational Safety and Health Act》(OSHA)
 《职业安全与健康法案》(OSHA)
 《Toxic Substance Control Act》(TSCA)
 《有毒物质控制法》(TSCA)
 《Consumer Product Safety Act》(CPSA)
 《消费者产品安全法案》(CPSA)
 《Federal Environmental Pollution Control Act》(FEPCA)
 《联邦环境污染控制法》(FEPCA)
 《The Oil Pollution Act》(OPA)
 《石油污染法》(OPA)
 《Superfund Amendments and Reauthorization Act TitleIII(302/311/312/313)》(SARA)
 《超级基金修正案和再授权法案 TitleIII(302/311/312/313)》(SARA)
 《Resource Conservation and Recovery Act》(RCRA)
 《资源保护和恢复法案》(RCRA)
 《Safety Drinking Water Act》(CWA)
 《安全饮用水法》(CWA)
 《California Proposition 65》
 《加州 65 号提案》
 《Code of Federal Regulations》(CFR)
 《联邦条例》(CFR)
 Regulation (EC) No. 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
 关于化学品的注册、评估、授权和限制(EC)第 1907/2006 号规例
 In accordance with all Federal, State and local laws.
 符合所有联邦、州和地方法律。

16. Additional Information (其他信息)

This file is only effective to the batteries (01WQ0087-01) provided by Therabody, Inc. which manufactured by Dongguan Large Electronics Co., Ltd. The commissioner provides the composition information of batteries, and promises its integrity and accuracy. Users should read this file carefully, and use the batteries in correct method. Shenzhen Yilink Testing Co., LTD. doesn't assume responsibility for any damage or loss because of misuse of batteries.

本文件仅对由委托方 Therabody, Inc.提供的,并由东莞市钜大电子有限公司生产的电池(01WQ0087-01)有效。该电池的成分信息由委托方提供并承诺其完整性和准确性。用户应仔细阅读此文件,并按照正确的方法使用电池,如因电池使用不当造成的损害或损失,深圳亿联检测有限公司不承担任何责任。

Important 注意事项

1. Nobody is allowed to photocopy or partly photocopy this test report without written permission of YILINK.
未经本试验室书面同意，不得复制或部分地复制本报告。
2. The test report is invalid without the signatures of Ratifier, Reviewer and Testing engineer.
本报告书无批准人、审核人、及主检人签名无效。
3. The test report is invalid if altered.
本报告涂改无效。
4. Objections to the test report must be submitted to YILINK within 15 days.
对报告书若有异议，应于收到报告之日起 15 天内向本公司提出。
5. The test report is valid for the tested samples only.
本报告仅对测试样品有效。
6. The test data and results do not have social proof function.
检测数据和结果不具备社会证明性作用。

*****End of report 报告结束*****