

SAFETY DATA SHEET

Product Name: Li-ion Cell

Review Date: 20 July 2020

Section 1- Chemical Product and Company Identification

PRODUCT NAME: Li-ion Cell

APPLICATIONS: For Stock No. 10007 BEANIE WITH TORCH - NAVY BLUE
10008 BEANIE WITH TORCH - HAVIS YELL
10015 BEANIE WITH TORCH - HAVIS ORANGE
10018 BEANIE WITH TORCH - GREEN

SUPPLIER: Draper Tools Ltd
Hursley Road
Chandlers Ford
Eastleigh
Hampshire
SO53 1YF

Draper Helpline +44 (0) 2380 494344
Opening hours 8:30-17:00 Monday – Friday.

Section 2- Hazards Identification

第二部分 危险性概述

Classification of Danger 危险性类别	See section 14 见第十四部分。
Primary Route(s) of Exposure 主要途径	Eye, skin contact, ingestion
Health Hazard 健康危害	The batteries are not hazardous when used according to the instructions of manufacturer under normal conditions. In case of abuse, there's risk of rupture, fire, heat, leakage of internal components, which could cause casualty loss. Abuses include 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. 正常条件下根据制造商的说明使用电池不会产生危害。使用不当的情况下，有破裂、火灾、热、内部成分的漏出的风险，并可能造成意外损失。使用不当的行为包括但不限于下列情况：长时间充电、短路、投入火中、硬物撞击、尖物刺破、破碎、破裂。

Section 3- Composition/Information on Ingredients

第三部分 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 (化学文摘索引登记号)
Lithium Cobalt Oxide 氧化锂	15-40	12190-79-3
Graphite 石墨	10-30	7782-42-5
Phosphate(1-), hexafluoro-, lithium 六氟磷酸锂	10-30	21324-40-3
Copper 铜	7-13	7440-50-8
Aluminum foil 铝箔	5-10	7429-90-5
Nickel 镍	1-5	7440-02-0

Labeling according to EC directives.

标签按照 EC 指令。

No symbol and risk phrase are required.

无需象形符号和危险短语。

Note: CAS number is Chemical Abstract Service Registry Number.

注意: CAS 号是化学文摘服务社注册号。

N/A=Not apply.

不适用。

Section 4- First Aid Measures

第四部分 急救措施

Eye 眼睛	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin 皮肤	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.
Inhalation 吸入	Remove from exposure and move to fresh air immediately. Use oxygen if available.
Ingestion 摄入	Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician. 饮用两份牛奶或水。如果当事人清醒清醒可以采取催吐的方法。并且立即就医。

Section 5- Fire Fighting Measures

第五部分 消防措施

Characteristics of Hazard 危险性	Toxic fumes, gases or vapors may evolve on burning
Hazardous Combustion Products 燃烧产生的危险物品	Carbon monoxide, carbon dioxide, lithium oxide fumes.
Fire-extinguishing Methods and Extinguishing Media 灭火方法及灭火剂	Water, CO ₂ . Don't use Halon fire extinguisher. May use dry powder, sand, earth.
Attention in Fire-extinguishing 灭火注意事项	The Firemen should put on an gas masks and full fire-fighting suits.

Section 6- Accidental Release Measures

第六部分 泄露应急处理

Personal Precautions, protective equipment, and emergency procedures 个人防护措施、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。请勿接触泄漏的材料。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 Containment 方法和材料控制	Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately. 出于安全, 阻止泄漏, 可以用干砂或沙土来密封液体泄露。立即清理泄漏。
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 部分的指令处理。用洗涤剂和水清洗污染区域, 收集所有受污染的洗涤水进行适当处置。

Section 7- Handling and Storage

第七部分 操作处置与储存

Handling 操作	Don't handling the batteries in manner that allows terminals to short circuit. 不要以让接头短路的方式对电池进行操作。
Storage 储存	Store and used far away from heat, sparks, open flame, or other heat ignition sources, and under room temperature(<30°C) in ventilating and dehumidifying environments.
Other Precautions 其他要注意的防范措施	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. 拆解、挤压、直接放入火中或高温条件下, 电池可能发生爆炸和燃烧。禁止短接或将电池的负极错误的安装在设备中。

Section 8 - Exposure Controls/Personal Protection

第八部分 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. 操作未被损坏的电池, 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防护服手套和安全眼镜。
Personal Protective Equipment 个人防护设备	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池局限在某一狭小空间内。正常使用条件下, 呼吸保护是不必要的。正常使用条件下不必考虑。 Protective Gloves. Not necessary under conditions of normal use. Other Protective Clothing or Equipment: Not necessary under conditions of normal use. Personal Protection is recommended for venting battery: Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields. 电池开阀试验时应做好个人防护, 呼吸防护, 防护服, 防护服装和有护边的安全玻璃罩都是要准备的。

Section 9- Physical and Chemical Properties

第九部分 理化特性

Physical State 物理状态	Appearance: Square	
	Color: Silvery 颜色: 银色	
	Odour: If leaking, smells of medical ether. 气味: 泄漏时, 有醚的"气味"。	
Change in condition 变化的条件		
pH 酸碱度	Not applicable as supplied 不适用	
Flash Point 闪点	Not applicable unless individual components exposed. 针对单个组分暴露情况, 其他不适用。	
Flammability 易燃度	Not applicable unless individual components exposed.	
Relative density: 相对密度	Not applicable unless individual components exposed.	
Solubility (water) 溶解性 (水溶性)	Not applicable unless individual components exposed. 针对单个组分暴露情况, 其他不适用。	
Solubility (other) 溶解性 (其他)	Not applicable unless individual components exposed. 针对单个组分暴露情况, 其他不适用。	

Section 10 – Stability and Reactivity

第十部分 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.
Hazardous Decomposition Products 有害分解物	Toxic Fumes and may form peroxides. 有毒烟雾。
If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalis, halogenated hydrocarbons. 如果发生泄漏, 避免与强氧化剂, 无机酸, 强碱, 卤代烃接触。	

Section 11 – Toxicological Information

第十一部分 毒理学信息

Irritation 刺激	In the event of exposure to internal contents, vapour 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的刺激性。
Sensitization 致敏	Not Available 无适用
Reproductive Toxicity 再生毒性	Not Available 无适用
Toxicologically Synergistic Materials 协同材料毒理学	Not Available 无适用

Section 12-Ecological Information

第十二部分 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.
Anticipated behavior of a chemical product in environment/possible environmental impact/ ecotoxicity 化学产品在环境/可能的环境预测的行为/生态毒性	Not Available 不适用

Section 13 – Disposal Considerations

第十三部分 废弃处置

Waste Treatment 废弃处置方法	Recycle or dispose of in accordance with government, stat & local regulations. 建议遵照国家和地方法规处置或再利用。
Attention for Waste Treatment 废弃处置注意	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, 不能丢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。

Section 14 – Transport Information

第十四部分 运输信息

UN number 联合国货物编号 (UN 编号)	3481
UN Proper shipping name 联合国运输专用名称	Lithium ion Batteries contained in equipments (Including lithium ion polymer batteries) 包含在设备中的锂离子电池(包括锂离子聚合物电池)
Transport hazard class(es) 运输/危险等级	9
Marine pollutant (Yes/No) 海洋污染物(是/否)	No
Transport in bulk (According to Annex II of MARPOL 73/78 and the IBC Code) 散装运输(按照附件 II 的 MARPOL 73/78 和 IBC 规则)	No information available. 无适用信息。
Special precautions which a user needs to be aware of, or needs to comply with in connection with transport or conveyance either within or outside their premises	
Transport information: 运输信息: The goods can be shipped by air in accordance with International Civil Aviation Organization (ICAO), TI or International Air Transport Association (IATA), DGR Packing Instructions (PI) 967 Section II appropriate of IATA/DGR 58th (2017 Edition) for transportation. 货物可根据国际民航组织 (ICAO), TI 或国际航空协会 (IATA), DGR 58th (2017 年版) 包装说明 (PI) 967 Section II 相关要求空运。 According to the special provision 188 of IMDG CODE (Amdt. 38-16) 2016 Edition, the products are not subject to dangerous goods. 根据 IMDG (Amdt. 38-16) 2016 版特殊规定 188, 该产品不属于危险品。 Other requirements for the US Department of Transportation (DOT) Subchapter C, Hazardous Materials Regulations if shipped in compliance with 49 CFR 173.185. 美国运输部 (DOT) 危险物质法规 C 分章中的其他规定, 运输符合要求 49 CFR 173.185. Separate batteries when shipping to prevent short-circuiting. They should be packed in strong packaging for support during transport. 电池在单独运输时, 应包装牢固, 防止短路。 More information concerning shipping, testing, marking and packaging can be obtained from label master at http://www.labelmaster.com/. 更多关于海运、测试、标记和包装的信息可以从 http://www.labelmaster.com/ 获得。 Transport Fashion: By air, by sea, by railway, by road 运输方式: 空运, 海运, 铁路, 公路。	

Section 15 – Regulatory Information

第十五部分 法规信息

Law information

法律信息

《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)

《联邦环境污染防治法》(FEPCA)

《The Oil Pollution Act》(OPA)

《石油污染法》(OPA)

《Superfund Amendments and Reauthorization Act Title III(302/311/312/313)》(SARA)

《超级基金修正案和再授权法案 Title III(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)

In accordance with all Federal, State and local laws

符合所有联邦、州和地方法律

Section 16 – Additional Information

第十六部分 其他信息

The information above is believed to be accurate and represents the best information currently available to us. However, concerne makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation. This material safety data sheet provides guidelines for the safe handling and use of this product; it does not and cannot advise on all possible situations. Therefore, your specific use of this product should be evaluated to determine if additional precautions are required.

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*****End of report*****
