



报告持有人 Report holder	宁波维科新能源科技有限公司 Ningbo Veken New Energy Technology Co.,Ltd.
报告持有人地址 Address of Report Holder	浙江省宁波保税西区港西大道3号1幢-1北侧厂房 #1, North Plant, 1 Building, No.3, Gangxi Avenue, North Part of Ningbo Tax-protected Zone, Zhejiang Province
样品名称 Description	锂离子电池组 Lithium-ion Battery Pack
型号规格 Model/Type	DCA102-04-03A
标称电压 Nominal Voltage	10.8V
额定容量 Rated Capacity	2600mAh
额定能量 Rated Energy	28.08Wh
品牌名 Trade Name	--
制造厂 Manufacturer	宁波维科新能源科技有限公司 Ningbo Veken New Energy Technology Co.,Ltd.
制造厂地址 Add. Of Manufacturer	浙江省宁波市北仑区小港维科工业园纬五路27号 No.27, Weiwu Road, Veken Industrial Park, Xiaogang, Beilun District, Ningbo City, Zhejiang Province



出版日期	2023 年 02 月 03 日	生效日期	2023 年 02 月 03 日
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**SECTION 1: Identification of the substance/mixture and of the company/undertaking**  
**第一部分：产品及供应商标识**

**Product identifier/产品标识:**

Product Name: Lithium-ion Battery Pack

产品名称: 锂离子电池组

Model/型号: DCA102-04-03A

Voltage/标称电压: 10.8V

Rated Capacity/额定容量: 2600mAh (28.08Wh)

**Relevant identified uses of the substance or mixture and uses advised against/已确认的物质或混合物的相关用途和建议不要使用的用途**

Relevant uses:: Curtain motor charging system

相关用途: 电动窗帘充电系统

Uses advised against: /

不建议使用: /

**Details of the supplier of the safety data sheet/安全数据表供应商的详细信息:**

Manufacturer/Supplier Name: Ningbo VEKEN New Energy Technology Co.,Ltd.

制造商/供应商: 宁波维科新能源科技有限公司

Address: No.27, Weiwu Road, VEKEN Industrial Park, Xiaogang, Beilun District, Ningbo City, Zhejiang Province

地址: 浙江省宁波市北仑区小港维科工业园纬五路27号

Website/网址: [Http://www.vekenner.com/](http://www.vekenner.com/)

Phone No./电话: +86-18042082196

Emergency phone No. (24h)/紧急联系电话: +86-18058249782

E-mail address/邮箱: qpbao@mail.veken.com

**SECTION 2: Composition / information on ingredients**  
**第二部分：主要成分 / 组成信息**

Li-ion Battery Pack is a mixture(锂离子电池是混合物)。

Hazardous Ingredients (Chemical Name) (化学组分)	Concentration or concentration ranges (%) (浓度或浓度范围)	CAS Number (CAS号 (化学文摘索引登记号)
Cobalt lithium manganese nickel oxide	30-45	N/A
Graphite Powder	15-25	7782-42-5
Lithium hexafluorophosphate (LiPF6)	1-3	21324-40-3
Poly(vinylidene fluoride) (PVDF)	0.1-2	24937-79-9
Aluminum foil	2-8	7429-90-5
Copper foil	5-10	7440-50-8
Carbon black and others	0.5-2	1333-86-4

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**SECTION 3: Hazards Identification**
**第三部分：危险性概述**

Emergency overview: 紧急情况概述	Not applicable 不适用
Classification according to GHS GHS分类	Not a dangerous substance according to GHS 不属于GHS危险物品
Label elements: 标签元素	
Hazard pictogram(s) 危险标签图	Not applicable 不适用
Signal word 提示语	Not applicable 不适用
Hazard statement(s) 危险声明	Not applicable 不适用
Precautionary statement(s): 预防声明	
Prevention 预防	Not applicable 不适用
Response 反应	Not applicable 不适用
Disposal 处理	Not applicable 不适用
Environmental hazards: 环境危害	No relevant information 无相关信息
Important symptoms: 重要症状	See section 11 for more information 见第11部分更多信息

**SECTION 4: First aid measures**
**第四部分：急救措施**

Inhalation 吸入	Remove from exposure and move to fresh air immediately. 立即从暴露的地方移到空气新鲜的地方。
Ingestion 食入	Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician. 饮用两杯牛奶或水，如果当事人仍然清醒可以采取催吐的方法，并且立即就医。
Skin contact 皮肤接触	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid. 万一接触，用大量的水冲洗皮肤或淋浴15分钟。同时除去污染的衣物和鞋子，迅速就医。
Eye contact 眼睛接触	Flush eyes with plenty of water for least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. 万一接触，立即用大量的清水冲洗眼睛至少15分钟，翻起上下眼睑，直至化学的残留物消失为止，迅速就医。

**SECTION 5: Firefighting measures**
**第五部分：消防措施**

Flash Point 燃点	N/A 不适用
Auto-ignition Temperature 自燃温度	N/A 不适用
Extinguishing Media 灭火介质	H <sub>2</sub> O, CO <sub>2</sub> 水, 二氧化碳
Special Fire-Fighting Procedures 特殊灭火程序	Self-contained breathing apparatus 自给式呼吸器
Unusual Fire and Explosion 异常火灾或爆炸	Cell may vent when subjected to excessive heat-exposing battery contents 当电芯暴露于过热的环境中时, 安全阀可能会打开
Hazardous Combustion Products 燃烧产生的危险物品	Carbon monoxide, carbon dioxide, lithium oxide fumes 一氧化碳, 二氧化碳, 锂氧化物烟气

**SECTION 6: Accidental release measures**
**第六部分：泄露应急处理**

Personal precautions, protective equipment and emergency procedures:

If the battery is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. The preferred response is to leave the area and allow the vapors to dissipate, avoid skin and eyes contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerated. If leakage of the battery happens, liquid could be absorbed by using sand, earth or other inert substance and contaminated area should be ventilated meantime.

个人注意事项、防护设备和应急程序:

如果电池泄漏, 请将人员撤离该区域直到烟雾消散。提供最大程度的通风, 清除有害气体。首选的反应是离开该区域并消散气体, 避免皮肤和眼睛接触或吸入气体。用吸收剂清除溢出的液体并焚烧。如果电池发生泄漏时, 液体可以用砂、泥土或其他惰性物质吸收, 污染区域应该保持通风。

Environment precautions:

Do not allow product to reach sewage system or any water source. Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water.

环境注意事项:

请勿让产品进入污水系统或任何水源。如果渗透进排水系统或任何水源, 应通知有关部门。不允许进入下水道/地面或地下水。

Methods and material for containment and cleaning up:

If battery casing is dismantled, small amounts of electrolyte may leak. Collect all released material in a plastic lined container. Dispose of according to the local law and rules, avoid leached substances to get into the earth,



sewer, waters.

抑制和清理材料的方法:

如果电池外壳被拆除, 可能会有少量电解液泄漏。收集所有释放的材料放在塑料容器。按照当地法律法规进行处理, 避免可溶物质进入大地、下水道或水源。

**SECTION 7: Handling and storage**

**第七部分: 操作处置与存储**

<p>Handling 操作处置</p>	<p>The battery should not be opened, destroyed, incinerate, since they may leak or rupture and release to the environment the ingredients that they contain in the hermetically sealed container. Do not short circuit terminals, or over charge the battery, forced over-discharge, throw to fire. Do not crush or puncture the battery, or immerse in liquids.</p> <p>电池不应打开, 破坏或焚烧, 因为它们可能泄漏或破裂, 并释放到环境中的成分, 他们包含在密封的容器。不要使端子短路, 或电池过充, 强行过放电, 扔向火场。请勿压碎、刺穿电池或将电池浸泡在液体中。</p>
<p>Storage 储存</p>	<p>Avoid mechanical or electrical abuse. Storage preferably in cool, dry and ventilated area, which is subject to little temperature change. Storage at high temperatures should be avoided. Do not place the battery near heating equipment, nor expose to direct sunlight for long periods.</p> <p>避免机械或电器的滥用。贮存于阴凉、干燥、通风处, 温度变化小。应避免在高温下储存。不要将电池放置在加热设备附近, 也不要长时间暴露在阳光直射下。</p>
<p>Other Precautions 其他要注意的防范措施</p>	<p>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.</p> <p>如果拆卸、压碎或暴露在火或高温下, 电池可能会爆炸或引起烧伤。不可短路或安装极性不正确。</p>

**SECTION 8: Exposure controls/personal protection**

**第八部分: 接触控制和个人防护**

<p>Engineering Controls 设计控制</p>	<p>Use local exhaust ventilation or other engineering controls to control sources of dust, mist, fumes and vapor.</p> <p>Keep away from heat and open flame. Store in a cool, dry place.</p> <p>使用当地的排气通风或其他工程控制, 以控制灰尘, 雾, 烟雾和蒸汽的来源。远离热源和明火。储存在阴凉、干燥的地方。</p>
<p>Personal Protective Equipment 个人防护装备</p>	<p>Respiratory Protection: Not necessary under normal conditions. Skin and body Protection: Not necessary under normal conditions, wear suitable protective clothing and gloves if handling an open or leaking battery. Hand protection: Wear suitable gloves if handling an open or leaking battery. Eye Protection: Not</p>

	<p>necessary under normal conditions, Wear safety glasses if handling an open or leaking battery.</p> <p>呼吸保护:正常情况下不需要。皮肤和身体防护:正常情况下不需要, 在处理打开或漏液的电池时, 应穿戴合适的防护服和手套。手保护:处理打开或漏液的电池时, 应佩戴合适的手套。眼睛保护:在正常情况下不需要, 如果处理打开或泄漏的电池, 请佩戴安全眼镜。</p>
Other Protective Equipment 其他防护设备	<p>Have a safety shower and eye wash fountain readily available in the immediate work area.</p> <p>在工作区域应该有一个立即可以使用的安全淋浴和喷水洗眼器。</p>
Hygiene Measures 卫生措施	<p>Do not eat, drink, or smoke in work area. Maintain good housekeeping.</p> <p>请勿在工作区域内进食、饮水或吸烟。</p>

**SECTION 9: Physical and chemical properties**  
**第九部分: 理化特性**

Physical State 物理状态	Form: Solid 形态: 固体
	Color: Black 颜色: 黑色
	Odor: Not applicable 气味: 不适用
pH 酸碱度	Not applicable 不适用
Melting point/freezing point 熔点/凝固点	Not applicable 不适用
Boiling Point, and Boiling range 沸点、沸点范围	Not applicable 不适用
Flash Point 易燃度	Not applicable 不适用
Upper/lower flammability explosive limits 燃烧或爆炸限上、下极限	Not applicable 不适用
Vapor Pressure: 蒸汽压	Not applicable 不适用
Vapor Density: (Air = 1) 蒸汽密度: (空气=1)	Not applicable 不适用
Density/relative density 密度/相对密度	Not applicable 不适用
Solubility in Water 水溶性	Not applicable 不适用



Auto-ignition temperature 自燃温度	Not applicable 不适用
Decomposition temperature 分解温度	Not applicable 不适用
Evaporation rate 蒸发速率	Not applicable 不适用
Flammability(soil, gas) 易燃性(土壤, 天然气)	Not applicable 不适用
Viscosity 粘度	Not applicable 不适用

**SECTION 10: Stability and reactivity**
**第十部分：稳定性和反应活性**

Stability 稳定性	The product is stable under normal conditions. 该产品在正常条件下是稳定的。
Conditions to Avoid 应避免的条件	Heat above 70C or incinerate. Deform, Mutilate, Crush, Disassemble, Overcharge, Short circuit, Expose over a long period to humid conditions. 加热至70℃以上或焚烧、变形、损坏、粉碎、拆卸、过充电、短路、长时间暴露于潮湿环境。
Incompatible Materials 不兼容的材料	Oxidizing agents, acid, base. 氧化剂，酸，碱。
Hazardous Decomposition Products 危害分解物	Carbon monoxide, carbon dioxide, lithium oxide fumes. 一氧化碳，二氧化碳，氧化锂烟雾。
Possibility of Hazardous Reaction 危险反应的可能性	Not applicable 不适用

**SECTION 11: Toxicological information**
**第十一部分：毒理学信息**

Irritation 刺激	Risk of irritation occurs only if the cell is mechanical, thermal or electrical abused to the point of compromising the enclosure. If this occurs, irritation to the skin, eyes and respiratory tract may occur. 只有电芯的外壳受到机械、热或电滥用到达一定程度时，会发生刺激的风险。如果发生这种情况，可能会刺激皮肤、眼睛和呼吸道。
Sensitization 致过敏	Not Available 不适用
Neurological Effects 神经系统的影响	Not Available 不适用
Teratogenicity 致畸	Not Available 不适用

Reproductive Toxicity 再生毒性	Not Available 不适用
Mutagenicity (Genetic Effects) 诱变 (遗传效应)	Not Available 不适用
Toxicology of Synergistic Materials 附带材料毒理性	Not Available 不适用

**SECTION 12: Ecological information**  
第十二部分：生态学信息

Ecological Toxicity 生态毒性	Not Available 不适用
Mobility in soil 土壤中的流动性	Not Available 不适用
Persistence and Degradability 持久性和降解性	Not Available 不适用
Bioaccumulation potential 生物聚积	Not Available 不适用
Other Adverse Effects 其他不利影响	Not Available 不适用

**SECTION 13: Disposal consideration**  
第十三部分：废弃处置

Product disposal recommendation 产品废弃处理建议	Observe local, state and federal laws and regulations. 遵守当地、州和联邦法律和法规。
Packaging disposal recommendation 包装处理建议	Disposal must be made according to official regulations 废弃处理必须根据当地法规

**SECTION 14: Transport information**  
第十四部分：运输信息

Label for conveyance: Lithium Battery Label

运输标签：锂电池标签

UN Number: UN3480 or UN3481

UN编码： UN3480或UN3481

Packing Group: N/A

包装类别： 不适用

Ems No.: F-A, S-I

Ems 编号： F-A, S-I

Marine pollution : No



海洋污染：无

Proper Shipping name: 1) Lithium-ion batteries; 2) Lithium-ion batteries packed with equipment; 3) Lithium-ion batteries contained in equipment. (Including Lithium-ion polymer batteries)

Hazard Classification: The goods shall be complied with the requirements of Section I (or Section IA) of Packing Instruction 965~967 of 64<sup>th</sup> DGR Manual of IATA (2023 edition), including the passing of the UN38.3 test. And complies with the Special Revision 188 and 230 of IMDG CODE (Amdt. 40-20) Edition.

正确运输名称： 1) 锂离子电池单独运输； 2) 锂离子电池和设备包装在一起； 3) 锂离子电池安装在设备中（包含锂离子聚合物电池）

危险分类：货物应符合IATA（2023年版）危险品规则DGR 64版本中P1965~967包装说明Section I(或 Section IA)的要求，包括通过UN38.3测试。同时也符合国际海运危险货物规则IMDG(Amdt. 40-20)版的188和230特别条款。

## SECTION 15: Regulatory information

### 第十五部分：法规信息

#### Law information

##### 法律信息

《Dangerous Goods Regulations》

《危险品规例》

《Recommendations on the Transport of Dangerous Goods Model Regulations》

《关于运输危险品示范规例的建议》

《International Maritime Dangerous Goods》

《国际危险货物规则》

《Technical Instructions for the Safe Transport of Dangerous Goods》

《危险货物安全运输技术规程》

《Classification and code of dangerous goods》

《危险品分类和编码》

《Occupational Safety and Health Act》(OSHA)

《职业安全与健康法》(OSHA)

《Toxic Substance Control Act》(TSCA)

《有毒物质控制法》(TSCA)

《Consumer Product Safety Act》(CPSA)

《消费品安全法》(CPSA)

《Federal Environmental Pollution Control Act》(FEPCA)

《联邦环境污染控制法》(FEPCA)

《The Oil Pollution Act》(OPA)

《油污法》(OPA)

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

《超级基金修正案和重新授权法案第三章(302/311/313)》(SARA)

《Resource Conservation and Recovery Act》(RCRA)

《资源保护与恢复法案》(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)

《联邦法规》 (CFR)

Screening of 224 Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) based on regulation (EC) No 1907/2006(REACH)

Directive 2006/66/EC and 2013/56/EU: the label, disposal and recycling of the battery shall meet the requirements of EU Directive 2006/66/EC and 2013/56/EU.

欧盟指令2006/66/EC及电池的标记，处置，回收等应满足欧盟指令2006/66/EC及2013/56/EU中的规定。2013/56/EU:

In accordance with all Federal, State, and local laws.

符合所有联邦，州和地方法律。

**SECTION 16: Other 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, Ningbo VEKEN New Energy Technology CO., Ltd 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 purpose. 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.

The data/information contained herein has been reviewed and approved for general release on the basis that this document contains no export-controlled information.

上述信息被认为是准确的，并代表了我們目前所能獲得的最佳信息。但寧波維科新能源科技有限公司不保證該等信息的適銷性或任何其他明示或暗示的保證，我們也不承擔因使用該等信息而產生的任何責任。用戶應自行進行調查，以確定信息是否適合其特定目的。雖然在準備本文所包含的數據時已採取了合理的預防措施，但僅供您參考、考慮和調查。本材料安全數據表為安全操作和使用本產品提供了指南；它不會也不能對所有可能的情况提供建議，因此應該評估您使用本產品的具体情况，以確定是否需要額外的預防措施。

本文件中所包含的數據/信息已經過審核并批准發布，基於本文件不包含任何受出口管制的信息。

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