



Material Safety Data Sheet

化学品安全技术说明书

Robotic pool cleaner WYBOT C2 Pro Vision (Containing

Product Name: Rechargeable Lithium-ion Battery Pack WY6S1P) 产品名称: 泳池清洁机器人 WYBOT C2 Pro Vision(内置

可充电锂离子电池组 WY6S1P)

Model:

型号: WY6S1P

Applicant: WYBOTICS CO., LTD

申请商: 天津望圆智能科技股份有限公司

Report No.:

报告编号:

TJWY20250109MSDS07

Category:

报告类别:

MSDS

广州三帕、亚技术服务有限公司

Guangzhou CPUP Certification Technology Service Co., Ltd.

Section 1 - Chemical and Company Identification 第一部分-化学品及企业标识				
Produc	Product Name Robotic pool cleaner WYBOT C2 Pro Vision (Containing Rechargeable			
		Lithium-ion Battery Pack WY6S1P)		
		泳池清洁机器人 WYBOT C2 Pro Vision(内置可充电锂离子电池组		
		WY6S1P)		
Battery Mod	lel/电池型号	WY6S1P		
Battery Ratings/电池额定参数		21.6V, 4600mAh, 99.36Wh (Nominal Capacity)		
115/50 7		21.6V, 4350mAh, 93.96Wh(Rated Capacity)		
Applicant		WYBOTICS CO., LTD		
申请商		天津望圆智能科技股份有限公司		
Applicant address		No.30, 4th Street Zhongnan, West Zone, Teda, Tianjin, China		
申请商地址		天津经济技术开发区西区中南四街 30 号		
Manufacturer		WYBOTICS CO., LTD		
制造商		天津望圆智能科技股份有限公司		
Manufacturer	address	No.30, 4th Street Zhongnan, West Zone, Teda, Tianjin, China		
Contact	地址	天津经济技术开发区西区中南四街 30 号		
information	Tel./应急电话	15932503205		
制造商联系信息 Email/邮箱 zilong.zhang@wybotics.com				

Section 2 - Hazards Identification

第二部分-危险性概述

Hazards Identification: 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.

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。

Skin: Skin contact with contents of an open battery can cause severe irritation or burns to the skin.

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。

Eye: Eye contact with contents of an open battery can cause severe irritation or burns to the eye.

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。

Section 3- Composition/Information on Ingredients 第三部分-成分/组成信息			
Chemical Name 化学名称	CAS Number CAS 号(化学文摘登记号)	Concentration or concentration ranges (%) 浓度或浓度范围(%)	
Ternary materials 镍钴锰酸锂	182442-95-1	38.42	
Graphite 石墨	7782-42-5	20.01	
Iron 铁	7439-89-6	17.67	
Dimethyl carbonate 碳酸二甲酯	616-38-6	6.98	
Copper 铜	7440-50-8	5.3	
Polypropylene 聚丙烯	9002-88-4	4.02	
Aluminum 铝	7429-90-5	2.7	
Ethylene carbonate 碳酸乙烯酯	96-49-1	2.20	
Lithium Hexafluorophosphate 六氟磷酸锂	21324-40-3	1.7	
Diethyl carbonate 碳酸二乙酯	105-58-8	1	

Note: CAS number is Chemical Abstract Service Registry Number.

注意: CAS 号是化学文摘服务注册号。

N/A= Not applicable.

N/A=不适用

Section 4- First Aid Measure			
		第四部分-急救措施	
Inhalation	Remove source of contamination or move victim to fresh air. Obtain medical advice.		
吸入	移除污染源或者;	将受害者移至新鲜空气处。寻求医生建议。	
Innection	Please rinse n	nouth thoroughly with water, induce vomiting under the guidance of	
Ingestion	professional per	sonage. Please seek medical treatment in time.	
食入	立即用清水漱口:	,在专业人士的指导下催吐,速就医。	
	Remove contam	inated clothes and rinse skin with plenty of water or shower for 15 minutes.	
Skin contact	Get medical aid.		
│皮肤接触 │	脱下己污染衣服。	,用大量的水冲洗至少 15 分钟,速就医。	
Eye contact	Irrigate with flowing water for 15 minutes. If irritation persists, consult a physician.		
眼睛接触	用流动水冲洗 15 分钟,如刺激持续发生,请求助于医生。		
	Section 5- Fire Fighting Measures		
	第五部分-消防措施		
Characteristics of	Hazard	Toxic fumes, gases or vapors may evolve on burning.	
危险特性		火灾时可释放有害浓烟、气体或者蒸汽。	
Hazardous Combi	ustion Products	Carbon monoxide, carbon dioxide, lithium oxide fumes and so on.	
燃烧产生的危险物品		一氧化碳,二氧化碳,锂氧化物烟气等。	



Fire-extinguishing Methods and	Diago, use water dry sand and other proper fire sytinguishing modic	
Extinguishing Media	Please use water, dry sand and other proper fire extinguishing media. 请使用水,干沙等合适的灭火介质。	
灭火方法及灭火剂	情使用水,十秒等台边的火火升灰。 	
Attention in	The firemen should put an entires mosts and full fire fighting suits	
Fire-extinguishing	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。	
灭火注意事项	相防人贝须佩戴防每 <u>国具、牙至</u> 岁相防服。 	

Section 6- Accidental Release Measure		
第六部分-泄漏应急处理		
Personal Precautions, protective	Restrict access to area until completion of clean-up.	
equipment, and emergency	Do not touch the spilled material. Wear adequate personal protective	
procedures	equipment as indicated in Section 8.	
个人预防措施、防护装备和应急	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	
程序	人防护设备,如第8部分所示。	
Environmental Precautions	Prevent material from contaminating soil and from entering sewers or	
环境保护措施	waterways.	
	防止物质污染土壤和进入下水道或水道。	
Methods and materials for	Stop the leak if safe to do so. Contain the spilled liquid with dry sand or	
Containment	earth. Clean up spills immediately.	
方法和材料控制	出于安全,阻止泄漏,可以用干沙或沙土来遏制液体泄露,立即清理	
	泄漏。	
Methods and materials for	Absorb spilled material with an inert absorbent (dry sand or earth). Scoop	
cleaning up	contaminated absorbent into an acceptable waste container. Collect all	
清理的方法和材料	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(干沙或沙土)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。	

Section 7- Handling and Storage				
	第七部分-操作处置与储存			
Handling	Don't handing the batteries in manner that allows terminals to short circuit. Do not open,			
操作	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	if the battery is subject to storage for such a long term as more than 3 months, it is recommended			
储存	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: 25±5°C, 60±25%R.H			
	长期存储: 25±5°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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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	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。Protective Gloves: Not necessary under conditions of normal use.	
Equipment 个人防护设备	防护手套:正常使用条件下不必考虑。 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。 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。	

Section 9- Physical and Chemical Properties
第九部分-理化特性
Appearance: Blue
外观颜色: 蓝色
Physical state: Solid
物理状态: 固体
Form: prismatic
 形状:
Odor: Odorless
气味: 无气味
Solubility: Partial soluble in water
溶解度: 部分溶于水



	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. 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。

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, vapor fumes may be very irritating to the eyes and skin.		
71 102	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	Not applicable.		
致敏	不适用		
Reproductive Toxicity	Not applicable.		
再生毒性	不适用		
Toxicologically Synergistic	Not applicable.		
Materials 协同材料毒理学	不适用		

Section 12-Ecological Information			
	第十二部分-生态学信息		
Consultants	Do not allow undiluted product or large quantities of it to reach		
General note	ground water, water course or sewage system.		
通用信息	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	Not applicable. 不适用		
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			
Mobility in soil	Not applicable.		
土壤中移动性	不适用		
Persistence and Degradability	Not applicable.		
持久性和降解性	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, state & local	line .
	regulations.	
	建议遵照国家和地方法规处置或再利用。	91,
	Deserted batteries couldn't be treated as ordinary trash. Couldn't be the	rown into fire or
Attention for Waste	placed in high temperature. Couldn't be dissected, pierced, crushed or t	treated similarly.
Treatment	Best way is	
废弃注意事项	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。	

Section 14 - Transport Information

第十四部分-运输信息

The battery shall be passed the test items of the UNITED NATIONS "Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria" section 38.3 and meet the requirements of UNITED NATIONS "Recommendations on the Transport of Dangerous Goods, model Regulations"

该电池必须通过联合国《关于危险货物运输的建议书 试验和标准手册》第38.3章节的测试项目和满足联合国《关于危险货物运输的建议书 规章范本》的要求。

The battery shall be protected so as to prevent short circuits. This includes protection against contact with conductive materials within the same packaging that could lead to short circuit;

该电池必须做好防短路保护。包括防止与同一封装内的导电材料接触可能导致的短路。

The packaging shall be adequate to avoid mechanical damage during transport, handling and stacking. 包装应足以避免在运输,处理和堆放期间的机械损坏。

The package must be handled with care and that a flammability hazard exists if the package is damaged. 包装必须小心处理,如果包装损坏,存在易燃危险。

With regard to transport, the following regulations are cited and considered:

关于运输,引用和考虑了以下法规:

- -The international Civil Aviation Organization (ICAO) Technical Instructions.
- -国际民用航空组织(ICAO)技术细则。
- -The international Air transport Association (IATA) Dangerous Goods Regulations.
- -国际航空运输协会(IATA)危险物品规则。

The battery can be shipped by air in according to PACKING INSTRUCTION 967 Section II of the 2025 IATA Dangerous Goods regulations 66th Edition.

该电池可以根据 2025 年 IATA 危险物品规则第 66 版包装说明 967 第 Ⅱ 部分运输。

UN number: UN3481;

UN 编号: UN3481:

UN Proper shipping name/Description (technical name): Lithium ion batteries contained in equipment;

UN 合适的运输名称/描述(技术名称): 锂离子电池内置于设备中;

UN Classification (Transport hazard class): Not applicable

UN 分类(运输危险类别):不适用

UN Packing Group: Not applicable



UN 包装类别:不适用

- -The international Maritime Dangerous Goods (IMDG) Code.
- -国际海运危险货物(IMDG)规则。

UN number: UN3481;

UN 编号: UN3481;

UN Proper shipping name/Description (technical name): Lithium ion batteries contained in equipment;

UN 合适的运输名称/描述(技术名称): 锂离子电池内置于设备中;

UN Classification (Transport hazard class): Not applicable

UN 分类(运输危险类别): 不适用 UN Packing Group: Not applicable

UN 包装类别:不适用

The battery is not restricted according to IMO IMDG Code (inc. Amendment 42-24) Special Provision188.

海运按照国际海事组织《国际海运危险货物规则》(42-24 版)特殊规定 188 不受限制。

Section 15 - Regulatory Information

第十五部分-法规信息

International Civil Aviation Organization (ICAO) Technical Instructions ICAO 国际民用航空组织(ICAO)技术细则:

1.Unless be exempted according to ICAO TI, the lithium ion cell/batteries (UN 3480, PI 965) and lithium metal cell/batteries (UN 3090, PI 968) are forbidden for carriage on passenger aircraft.

除非依据《技术细则》的相关要求取得豁免,单独包装的锂离子电池(芯)(UN 3480, PI 965)和锂金属电池(芯)(UN 3090, PI 968)货物禁止使用客机运输。

2.Unless be approved according to ICAO TI, Lithium ion cells/batteries (UN 3480, PI 965) must be offered for transport at a state of charge (SoC) not exceeding 30% of their rated design capacity.

除非依据《技术细则》的相关要求取得特别批准,按照包装说明 965 要求运输的锂离子电池(芯)货物,交运时锂离子电池(芯)的荷电状态不得超过其额定容量的 30%。

Section 16 - Additional Information

第十六部分-附加信息

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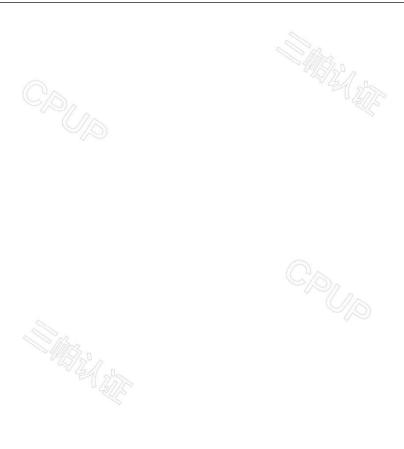
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Other Information 其他信息:

The information above is believed to be accurate and represents the best information currently available to us. However, we 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 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.

在我们看来上面的信息是准确的,这是我们目前能提供的最佳的信息。但是,对于这些信息,我们不对商品的性能做任何明示的或者暗示的保证,我们也不对使用这些信息造成的后果担负任何责任。用户应当自己调查研究后决定这些信息是否适用于他们的特定用途。尽管在该文档里提出了合理的预警,但是这仅仅只是给您做参考、考量和调查。这份安全技术说明书提供了安全处理和使用该产品的指南,但是它没有,也不能对所有可能发生的情景提出建议,所以您需要根据您对该产品的特定使用情况来决定是否需要其他的预防措施。





设备照片 Photos of equipment





--End of report----报告结束--