Report Number:SUMEC-2020-020

SUMEC

安全数据表 Safety-Data Sheet

Name of Sample: <u>Battery pack</u>

生产单位: 江苏苏美达五金工具有限公司

Manufacturer: <u>SUMEC HardWare&tools Co.,Ltd.</u>

报告编号:_SUMEC-2020-020_

Report Number:

Date of Issue :

江苏苏美达五金工具有限公司测试中心

SUMEC HardWare&Tools Co.,Ltd. Test Center

Report Number:SUMEC-2020-020

声明

Statement

1. 本报告无检测单位印章无效。

The test report is invalid without the official stamp of SUMEC.

2. 未经本试验室书面同意,不得部分地复制本报告。

Nobody is allowed to photocopy or partly photocopy this test report without written permission of SUMEC.

3. 本报告无批准人、审核人及检测人签名无效。

The test report is invalid without the signatures of Ratifier, Reviewer and Testing engineer.

4. 本报告涂改无效。

The test report is invalid if altered.

- 5.对检测报告若有异议,应于收到报告之日起十五天内向检测单位提出。 Objections to the test report must be submitted to SUMEC within 15 days.
- 6. 本报告仅对送检样品负责。

The test report is valid for the tested samples only.

7. 本报告仅供委托方内部质量控制使用,不对社会公开出具。
This report is only used for internal quality controlling of the client.

地 址:中国 江苏省南京高新开发区星火路1号

Address: No.1, Xinghuo Rd., Nanjing Hi-tech Zone, Nanjing, Jiangsu, China

电 话(Tel): (025)58638353

传 真(FAX): (025)58638017

邮政编码(Post Code): 210061

E-mail: xxiaojun@sumec.com.cn

http://tools.sumec.com.cn

江苏苏美达五金工具有限公司测试中心 SUMEC

Report Number:SUMEC-2020-020

安全数据表

Safety-Data Sheet

1. 化学品及企业标识				
Chemical	product and company identification			
样品名称	电池包			
Name of sample	Battery pack			
样品型号	24VBAT-LTW			
Type/modle	24V 1.3Ah 31.2Wh			
申请单位	江苏苏美达五金工具有限公司			
Applicant Name	Sumec Hardware&Tools Co.,Ltd.			
申请单位地址	江苏省南京市高新开发区星火路1号			
Application Address	1#Xinghuo Road, Nanjing High-Tech Zone, Nanjing,			
	Jiangsu, P.R.China			
生产工厂	宁波三叶工具有限公司			
Manufacturer	NingBo Sayeah Tools Co.,Ltd			
生产工厂地址	宁波市海曙区洞桥工业区洞北路 50 号			
Manufacturer Address	No.50 Dongbei Road, Dongqiao Industrial Zone, Haishu			
	District , Ningbo, PEOPLE'S REPUBLIC OF CHINA			
检测依据	EEC Directive 93/112/EC			
Inspection according	联合国《关于危险品货物运输的建议书》			
	UN "Recommendations on the TRANSPORT OF DANGEROUS GOODS"			
接样日期	2020-03-20			
Receiving				
签发日期	2020-03-20			
Date of issue	no the Ma			
有效期至	2021-03-19			
Valid until	京			
检测专用章	子			
Special seal for test	THE STANKS			
report	一种			
检测: 周庆祥 6 3 祥	审核: 谢小军 小 郑 批准: 郦冰 孙 孙			

Tested by: Reviewed by: Approved by:

SUMEC

Report Number:SUMEC-2020-020

2. 危险性概述				
Hazards identification				
爆炸危险性 Explosive risk	该物品不属于爆炸危险品 This article does not belong to the explosion dangerous goods			
易燃危险性 Flammable risk	该物品不属于易燃危险品 This article does not belong to the flammable material			
氧化危险性 Oxidation risk	该物品不属于氧化危险品 This article does not belong to the oxidation of dangerous goods			
毒害危险性 Toxic risk	该物品不属于毒害危险品 This article does not belong to the toxic dangerous goods			
放射危险性 Radioactive risk	该物品不属于放射危险品 This article does not belong to the radiation of dangerous goods			
腐蚀危险性 Mordant risk	该物品不属于腐蚀危险品 This article does not belong to the corrosion of dangerous goods			
其他危险性 other risk	该电池瓦时率为 31.2 Wh, 属于锂离子电池。 The watt-hour rate of the battery is 31.2 Wh, which belong to the Lithium-ion batteries.			

3. 成分/组成信息						
Composition information						
化学名称	化学式	CAS 号	重量含量			
Common Chemical Name	Chemical Formula	CAS No.	Wt %			
铜 Copper	Cu	7440-50-8	7			

SUMEC

Report Number:SUMEC-2020-020

铝 Aluminium	A1	7429-90-5	4
六氟磷酸锂 Lithium hexafluoro phosphate	LiPF ₆	21324-40-3	12
钴酸锂 Lithium cobalt oxide	LiCoO ₂	12190-79-3	35
碳 Carbon	С	7440-44-0	19
铁 Iron	Fe	7439-89-6	16
聚乙烯 Polyethylene	PE	9002-88-4	3
聚丙烯 Polypropylene	PP	9003-07-0	3
镍 Nickel	Ni	7440-02-0	1

4. 急救措施 First aid measures

电池外壳破裂,内容物接触人体会产生危害,一旦发生接触,应采取以下应急措施:

Once battery shell rupture, content contact with the human body will produce harm, once contact, should take the following emergency measures: 眼睛:万一接触,立即用大量的清水冲洗至少 15 分钟,翻起上下眼睑,直到化学的残留物消失为止,迅速就医。

Eye: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

SUMEC

Report Number:SUMEC-2020-020

皮肤:万一接触,用大量水冲洗至少15分钟,同时除去污染的衣物和鞋子,迅速就医。

Skin: Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.

吸入: 立即从暴露处移至空气清新处,如果呼吸困难给予输氧,立即就医。

Inhalation: Remove from exposure and move to fresh air immediately. Use oxygen if available.

食入: 饮用两杯牛奶或水。如果当事人仍然清晰可以采取催吐的方法,并且立即就医。

Ingestion:Give at least 2 glasses of milk or water. Induce vomiting unless
patient is unconscious. Call a physician

5. 消防措施

Fire-fighting measures

燃点: 不适用

Flash Point: N/A.

自燃温度: 不适用

Auto-Ignition Temperature: N/A.

灭火介质: 大量水(降温) 二氧化碳

Extinguishing Media: Water, CO2.

特殊灭火程序: 自给式呼吸器

Special Fire-Fighting Procedures Self-contained breathing apparatus.

异常火灾或爆炸: 当电芯暴露于过热的环境中时,安全阀可能会打开。Unusual Fire and Explosion Hazards

Cell may vent when subjected to excessive heat-exposing battery contents.

燃烧产生的危险物品:一氧化碳,二氧化碳,锂氧化物烟气

Hazardous Combustion Products

SUMEC

Report Number:SUMEC-2020-020

Carbon monoxide, carbon dioxide, lithium oxide fumes.

6. 泄漏应急处理

Accidental release measures

为防止电池材料泄露或释放采取的措施

如果电池内部材料泄露,操作人员应立刻撤离事故区直到烟气消散。将通风设备打开吹散危险性气体。用抹布擦净试验区,清除溢出的液体,将泄露电池放进塑料袋中,然后放进钢制容器。避免皮肤和眼睛接触或吸入有害气体。

Steps to be taken in case Material is Released or Spilled

If the battery material is released, remove operators from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. Wipe it up with a cloth, and dispose of it in a plastic bag and put into a steel can. The preferred response is to leave the area and allow the battery to cool and vapors to dissipate. Provide maximum ventilation. Avoid skin and eye contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerate.

废弃物处置方法

建议将电池完全放电,锂金属电池消耗完电池内部的金属锂,并且交付给专业机构处理。

Waste Disposal Method

It is recommended to discharge the battery to the end. Use up the metal lithium inside the lithium metal battery, and delivered to professional institutions for further treatment.

7. 操作处置和储存

Handling and storage

禁止打开、毁坏或焚烧电池,因为电池有可能在这些处理过程中发生爆炸、破裂或泄露等事故。

SUMEC

Report Number:SUMEC-2020-020

禁止将电池短路、过充、强制放电或扔入火中。禁止挤压刺穿电池或将电池浸入溶液中。

The battery should not be opened, destroyed or 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. 操作处置和储存中的防范措施

禁止物理或电滥用,禁止高温储存,最好将电池储存在阴凉、干燥、通风及温度变化较小的环境中。禁止将电池接触加热设备或将电池直接暴露于阳光中。

Precautions to be taken in handling and storing

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. 其他要注意的防范措施

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。禁止短接或将电池正负极错误的安装在设备中。

Other Precautions

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.

8. 接触控制/个人防护

Exposure controls/personal protection

呼吸防护:

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。Respiratory

SUMEC

Report Number:SUMEC-2020-020

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.

通风条件

正常使用条件下不必考虑。

Ventilation

Not necessary under conditions of normal use.

防护手套

正常使用条件下不必考虑。

Protective Gloves

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。

Other Protective Clothing or Equipment Not necessary under conditions of normal use. 电池开阀试验时应做好个人防护

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。Personal Protection is recommended for venting battery

Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

9. 物理和化学特性

Physical and chemical properties

外形: 方形

Appearance: square

认证编号: 1120010441

Ref, No.: 1120010441

SUMEC

Report Number:SUMEC-2020-020

气味: 泄漏时,有醚的气味。

Odour: If leaking, smells of medical ether.

酸碱度: 不适用

pH: Not applicable as supplied.

闪点:针对单个组分暴露情况,其他不适用。

Flash Point: Not applicable unless individual components exposed.

易燃度:针对单个组分暴露情况,其他不适用。

Flammability: Not applicable unless individual components exposed.

相对密度:针对单个组分暴露情况,其他不适用。

Relative density: Not applicable unless individual components exposed.

溶解性(水溶性)针对单个组分暴露情况,其他不适用。

Solubility (water): Not applicable unless individual components exposed.

溶解性(其他)针对单个组分暴露情况,其他不适用。

Solubility (other): Not applicable unless individual components exposed.

10. 稳定性和反应活性

Stability and reactivity

稳定性:产品在第7节所述的条件下稳定。

Stability: Product is stable under conditions described in Section 7. 应避免的条件: 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。

Conditions to Avoid: Heat above 70°C or incinerate. Deform. Mutilate.

Crush. Disassemble. Overcharge. Short circuit. Expose over a long period

to humid conditions.

应避免的材料:氧化剂,碱,水。

Materials to avoid: Oxidising agents, alkalis, water.

危险分解物:有毒烟雾,并可能形成过氧化物。

SUMEC

Report Number:SUMEC-2020-020

Hazardous Decomposition Products: Toxic Fumes, and may form peroxides.

聚合危害: 不适用

Hazardous Polymerization: N/A.

如果发生泄露,避免与强氧化剂,无机酸,强碱,卤代烃接触。

If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalies, halogenated hydrocarbons.

11. 毒理学资料

Toxicological information

标志及症状:无,除非电池破裂。

Signs & symptoms: None, unless battery ruptures.

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。

In the event of exposure to internal contents, vapour fumes may be very irritating to the eyes and skin.

吸入:对肺有刺激性。

Inhalation: Lung irritant.

皮肤接触:对皮肤刺激性。

Skin contact: Skin irritant.

眼睛接触:对眼睛有刺激性。

Eye contact: Eye irritant

食入: 吞下中毒。

Ingestion: Poisoning if swallowed.

下列情况下会危险人员身体健康:如果与电池内部材料直接接触,皮肤可能会出现干燥、灼烧等轻微或严重的刺激,并且损坏靶器官的神经,肝脏和肾脏。

Medical conditions generally aggravated by exposure: In the event of exposure to internal contents, moderate to server irritation, burning and dryness of the skin may occur, Target organs nerves, liver and kidneys.

SUMEC

Report Number:SUMEC-2020-020

12. 生态学资料

Ecological information

对哺乳动物的影响:目前未知。

Mammalian effects: None known at present.

生态毒性:目前未知。

Eco-toxicity: None known at present.

生物体内积累:慢慢地生物降解。

Bioaccumulation potential: Slowly Bio-degradable.

环境危害: 目前没有已知的环境危害。

Environmental fate: None known environmental hazards at present.

13. 废弃处置

Disposal consideration

禁止焚烧,或使电池温度超过 70°C,这种滥用可导致泄漏和/或电池爆炸。应按照相应的地方性法规处理。

Do not incinerate, or subject cells to temperature in excess of 70° C, Such abuse can result in loss of seal leakage, and/or cell explosion. Dispose of in accordance with appropriate local regulations.

14. 运输信息

Transport information

运输标签: 锂电池标记

Label for conveyance: Lithium Battery Mark.

UN 编号: UN3480, UN3481

UN Number: UN3480, UN3481

包装等级: N/A

Packaging Group: N/A

EmS 编号: F-A,S-I

SUMEC

Report Number:SUMEC-2020-020

EmS No: F-A, S-I

海洋污染物:无

Marine pollutant: No

正确的装运名称:

Proper Shipping name:

单独运输: 锂离子电池(包括锂离子聚合物电池)

Separate transport:Lithium ion batteries(Including lithium ion polymer batteries);

与设备包装在一起的锂离子电池(包括锂离子聚合物电池)

Packed with equipment:Lithium ion batteries packed with equipment (Including lithium ion polymer batteries)

危害分类:货物符合《国际海运危险货物规则》特殊规定 188(海运 IMDG CODE (Amdt. 39-18)(2018 年版),包括通过 UN38.3 测试手册要求。

Hazard Classification: The goods are complied with the requirements of Special provision 188 of IMDG CODE (Amdt. 39-18) (2018 Edition), including the passing of the UN38.3 test.

15. 法规信息

Regulation information

法律信息

Law information

《危险品规则》

《Dangerous Goods Regulations》

《对危险货物运输的有关规定的建议》

《Recommendations on the Transport of Dangerous Goods Model Regulations》

《国际海运危险货物规则》

《International Maritime Dangerous Goods》

《危险货物品名表》

SUMEC

Report Number:SUMEC-2020-020

《List of dangerous goods》

《欧洲道路危险货物国际运输协议》

《European Agreement concerning the International Carriage of Dangerous Goods by Road》

《危险品安全运输技术指令》

《Technical Instructions for the Safe Transport of Dangerous Goods》

《危险货物分类和品名编号》

《Classification and code of dangerous goods》

《职业安全卫生法》

《Occupational Safety and Health Act》 (OSHA)

《有毒物质控制法》

《Toxic Substance Control Act》 (TSCA)

《消费产品安全法》

《Consumer Product Safety Act》 (CPSA)

《联邦环境污染控制法》

《Federal Environmental Pollution Control Act》 (FEPCA)

《石油污染法案》

《The Oil Pollution Act》 (OPA)

《超级基金修正案和再授权法案III(302/311/312/313)》

 $\langle\!\langle \text{Superfund Amendments and Reauthorization Act Title} \text{III} (302/311/312/313) \rangle\!\rangle$

(SARA)

《资源保护及恢复法案》

《Resource Conservation and Recovery Act》 (RCRA)

《安全饮用水法》

《Safety Drinking Water Act》(CWA)

《加州65 提案》

《California Proposition 65》

《美国联邦法规》

《Code of Federal Regulations》(CFR)

SUMEC

Report Number:SUMEC-2020-020

根据所有联邦、州和地方法律。

In accordance with all Federal, State and local laws.

16. 其他信息

Other information

本文件仅对由委托方江苏苏美达五金工具有限公司提供的,并由江苏苏美达五金工具有限公司生产的电池 24VBAT-LTW 型号有效。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,江苏苏美达五金工具有限公司(SUMEC)不承担任何责任。

This file is only effective to the batteries 24VBAT-LTW provided by commissioner SUMEC Hardware & Tools Co., Ltd., which manufactured by SUMEC Hardware & Tools 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. SUMEC HardWare&Tools Co., Ltd. (SUMEC) doesn't assume responsibility for any damage or loss because of misuse of batteries.