Safety Data Sheet

Name of Products:	Rechargeable Li-ion Battery
Applicant:	Winkind Company Limited
Factory:	Winkind Company Limited

Tester	**Reviewer**	**Approver**
Project Engineer	**Chief Engineer**	主管工程师 / **Chief Engineer**

GUANGDONG UTL CO., LTD.

TEST REPORT

1. Identification of the product and supplier (ii. rfflH , .)	
ffJlr **Name of goods**	nJ Jt Et W =f Et fR Rechargeable Li-ion Battery
ffJlr -%} **Type/Model**	WL0013-3
#r **Rating**	43.2V, 2.90Ah, 125.3Wh
r&•-& **Commissioned by**	*i* tJ lfiU -, iJiU4tt-ff 0 iiJ Winkind Company Limited
t&!'ft-©:it!!:ttl: **Commissioner address**	i*:tJIlm:ft nf [25±¥1:-tlAn@9" ,,>t±IK N,i:,,)i'i31 % 31#, FuXin Road, PingDi, Longgang, 518117, Shenzhen, China
j''rr **Manufacturer's name**	i*:tJlll1iJl, , ibx1'4tt-ff 0iiJ Winkind Company Limited
j"r *r* it!!:ttl: **Manufacturer address**	i*:tJIlm:ft M [K±f.1:-tl!An@9" ,C,,HIK N,i:_,)i'i31 % 31 #, FuXin Road, PingDi, Longgang, 518117, Shenzhen, China
JE1ttti **Inspection according to**	OO«*rm ITT » UN "Recommendations on the TRANSPORT OF DANGEROUS GOODS"
it JFR ft.i ! **Emergency telephone call**	+86-755-84560900
tt BAA/ Receiving date: 2021-12-22	:.ft BAA/ Date of issue: 2022-01-11

2 Hazards Identification {!B◆ttffitit)	
MHtm◆t Explosive risk	i◆Jmii◆◆-fMHtm £ This article does not belonq to the explosion danqerous qoods
t,?&m Flammable risk	◆◆£◆◆-f◆t,?i&m This article does not belong to the flammable material
ll1tm◆t Oxidation risk	◆◆ifii◆◆-fll1tm◆£ This article does not belong to the oxidation of dangerous goods
◆*m◆t Toxic risk	◆◆£◆◆-f◆*m◆iii This article does not belonq to the toxic danqerous qoods
mMm lt Radioactive risk	◆◆£◆◆-f$:Mm◆iii This article does not belong to the radiation of dangerous goods
◆t:Rm◆t Mordant risk	◆◆ifp◆◆-f◆iP.JTI:◆pi This article does not belong to the corrosion of dangerous goods
Jt1mm◆t other risk	Etitt!f/iat$jg125.3Wh, -fiA m £1i! o Watt hour rate 125.3Wh, which belong to the Class 9 of dangerous goods.

3. Composition Information (Ji17t/ffl.Jil-m,◆,)

it*.5x5t Chemical Composition	it*:i:t Chemical Formula	mi t a.5tl Weight(%)	CAS J;} CAS Number
iJ!!tis"t.U ffll/ Lithium Manganese Nickel And Cobalt	UNixCOyMn1-x-P2	15-25	182442-95-1
;s I Graphite	C24X12	15-25	7782-42-5
/ Iron	Fe	10-20	7439-89-6
/ Copper	Cu	1-10	7440-50-8
Twal = f:fl / Dimethyl carbonate	C3HsO3	1-10	616-38-6
'f§/ Aluminium	Al	1-10	7429-90-5
Z.,#,J Polyethylene	(C2H4)n	1-10	9002-88-4
TwiM Z..,#fiff J Ethylene Carbonate	C3H4Q3	1-10	96-49-1
Z,M Z, I Ethyl Acetate	C4Ha02	0.1-1	141-78-6
I Carbon Black	C	0.1-1	1333-86-4
i,li!/ Nickel	Ni	0.1-1	7440-02-0
TwiMW! Lithium Carbonate	Li2CO3	0.1-1	554-13-2
N-f:fl lltt: ;1;3\;li]/ 1-Methyl-2-Pyrrol idi none	CsH9NO	0.1-1	872-50-4

4. First aid measures (ftffi1ffi)

UfUf:

-*ti· .iz: m*•oomJ.K &15*#·n T . oo m m . m • -

Eye

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

&:.lk:

-*ti, ffl*A7.K &15*#, ¾ 00 . IB - .

Skin

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

l!&A:

.iz: MaB 8 mffi . * m* •• ..iz: • ·

Inhalation

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

itA:

i ffflnFFm: lb.l0P* lfAm m Bttey L;J, Ott{(it 00::ir¥! ' ff_ft iz g p. 。

Ingestion

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

5. Fire-fighting measures (ffi ffi1ffi)

tl.tR\: ::f ffl

Flash Point: N/A.

§ jt&m_Jjt: ::f ffl

Auto-Ignition Temperature: N/A.

"ll<;k-fl-M: *A7.K(1iii=if) ,Wi

Extinguishing Media: Water, CO2.

!Nf "ll<;k : El :rtof :H

Special Fire-Fighting Procedures: Self-contained breathing apparatus.

##;k •• : zaa tt oo * · ey rrff.

Unusual Fire and Explosion Hazards:

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

tl.t : -•*lwl.=•* 1w1.w•

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, lithium oxide fumes.

6. Accidental release measures

Steps to be Taken in case Material is Released or Spilled

If the battery material is released, remove personnel 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.

Waste Disposal Method

It is recommended to discharge the battery to the end, to use up the metal lithium inside the battery, and to bury the discharged battery in soil.

7. Handling and storage

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.

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.

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. Exposure controls/personal protection (18!1!$tl/ A-fit?)

tf'

rrH . ff- 4H¥•*· rrH m ¥- -K
#- #T, S .

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.

3mIxlAl#

K#1fffl 1!:f:T iW5 "

Ventilation

Not necessary under conditions of normal use.

itiJ -¥:i:

K#1fffl 1!:f:T iW5 "

Protective Gloves

Not necessary under conditions of normal use.

jt:1tf!. tf' Hli ii 4-

K # ff*ffl* 1!:f: T *m* "

Other Protective Clothing or Equipment

Not necessary under conditions of normal use.

El! * -ut®: a-t$2ittjf1-A tf'

[tlJ. ltiJ -¥:it:,J m ½- - m4 o

Personal Protection is recommended for venting battery

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

9. Physical and chemical properties (JJl!.fll,f.t !f\ftt)

tr= ti%

Appearance: Prismatic shape

1Ri!ff;; : PNS21064426 04001

Ref. No.: PNS21064426 04001

: r!ltii!l-t, MEB4.P3fo

Odour: If leaking, smells of medical ether.

••It:f ffl 。

pH: Not applicable as supplied.

jC 2 : • Z ! H i i.i\J& 5'r)t>fth / f ffl 。

Flash Point: Not applicable unless individual components exposed.

liJ" tt = - zau i.i\JJ&5'r:Jtfth/f ffl o

Flammability: Not applicable unless individual components exposed.

ffl Mll: - zaB !J&*:Jt /f fflo

Relative density: Not applicable unless individual components exposed.

Mfftt cJJ<m•&) = - za&i.i\JJ&5'r:Jtfth/f ffl o

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

mfftt <jtf!B) = • za&i.i\JJ&5'r:Jtfth/f ffl o

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

10. Stability and reactivity (jEtt.fll& rntt)

·&: F'rfbB: 711,JiJriiEB ftj:TU\;Eo

Stability: Product is stable under conditions described in Section 7.

il!k.a<l*#= ./J□m70°CL;J_t t4JE, ff;, ±, t}Wf, 1feEP, u;c, rHJi!io

-lf!l-tl'aJa&rr1ijrtEB f4T o

Conditions to avoid: Heat above 70°C or incinerate. Deform. Mutilate. Crush. Disassemble. Overcharge. Short circuit. Expose over a long period to humid conditions.

il!sa<J# : •1-ttr1J, N, 1Jc

Materials to avoid: Oxidising agents, alkalis, water.

tita M : - . #m % :ct•1-t o

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

•*fit: /f ffl

Hazardous Polymerization: N/A.

*£ r!lt&, -1-tM, mg, −. *Mo

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

11. Toxicological information ($i.!fl: '4)

标志及症状：无，除非电池破裂。

Signs & symptoms: None, unless battery ruptures.

$ -•OOM&T, - -ey"x1m• Moo •tt-

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

11,&A, X'Jip:fBlhJtL

Inhalation: Lung irritant.

&:J!Rt&ti,x'Mt:fBLlfitL

Skin contact: Skin irritant

D!ill&ti, x1§mHrw11JJ ·t:L

Eye contact: Eye irritant

it-A, ::e:Tq:i."

Ingestion: Poisoning if swallowed

T M&T•- & , - 'i: $M MOO- . @• F•oo a. ey" M - 00 . #Hffl - cMm, ffm)OO "

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.

12. Ecological information ($ '4)

x,fllfff-'l.��1¥J◆n(iij: ElJW*ffi"

Mammalian effects: None known at present.

'i: -• : El1W*ffi"

Eco-toxicity: None known at present.

1: -fit. : tftf±ih'i: M"

Bioaccumulation potential: Slowly Bio-degradable.

: EIJW S%100 m*"

Environmental fate: None known environmental hazards at present.

13. Disposal consideration (Jl# .:I.)

;:r-◆1it◆' ◆◆ ◆◆ 1fi*it*/fH:i170˚C' 13:#1.ileyt@8dl1ltiuo/◆ ◆◆;1.1i1:。 rt: mi,t§Jiy 00±ih'tt;12H lll :1::E!L。

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. Transport information (:ie {§ ,,)

5•= mA m £ m.& mmili• m

Label for conveyance: the Class 9-Lithium Battery hazard label, the Cargo aircraft Only Label

UNfi%: UN3480

UN Number: UN3480

'§. M&: Group ii

Packing Group: Group Ⅱ

EmSfi%, F-A, S-1

Ems No: F-A, S-1

1'5 = x

Marine pollutant: No

.1Hiffla<J?Jct : '!I -f- E:j,)l!!.(i.U&-f- il-tm l,j,Jtli.)

Proper Shipping name: Lithium ion batteries (including Lithium ion polymer batteries)

fe: ?t : mtm@J!'flATA m63AADGR-¥:M13 i3t 965mlATi}J!JE(2022WAA), t□ ilim mtmtJ!.9f1J (Arndt. 40-20) 2020AA, 13:t% :i1UN38 .3 iJIUii\f:M :Jto
Hazard Classification: The goods shall be complied with the requirements of Section IA of Packing Instructions 965 of 63nd DGR Manual of IATA (2022 Edition) and IMDG CODE (Arndt. 40-20) 2020 Edition, including the passing of the UN38.3 test.

S•= mA m £ m.

Label for conveyance: the Class 9-Lithium Battery hazard label, the shipping mark.

UNfi-i}: UN3481

UN Number: UN3481

'§ ti: ffl

Packing Group: N/A.

EmSfi-i}: F-A , S-1

Ems No: F-A, S-1

ffifT5 = x

Marine pollutant: No

.1Hiffie<J m = W-f-E§,1111. tErii: q:r Cl3MW -f- il-tR/EE1,1l!i.) 。

Proper Shipping name: Lithium ion batteries contained in equipment. (including Lithium ion polymer batteries)

fe: ?t : mtm@J!'flATAm63DGR-I-:ffIt13 i3t 967mlTi}J\IJE(2022 AA), I □ ilim mtm1!.J1L(Amdt. 40-20)2020AA, 13:J'J5 J1LJN38.3$J)Uli\f:fflt :Jto
Hazard Classification: The goods shall be complied with the requirements of Section I of Packing Instructions 967 of 63nd DGR Manual of IATA (2022 Edition) and IMDG CODE (Arndt. 40-20) 2020 Edition, including the passing of the UN38.3 test.

15. Regulation information (fa, ,)

-m@,

Law information

«m 4t!Jp"H!ii!!!!U »
((Dangerous Goods Regulations))

«Mm m4t!J •oo oom »
((Recommendations on the Transport of Dangerous Goods Model Regulations))

«œ ,¥; m m 4tU-Mi!!!J »
((International Maritime Dangerous Goods))

«m iPP:.?'i: •tt*m »
«Technical Instructions for the Safe Transport of Dangerous Goods))

«m m4tl15t t □pdp;g -% »
((Classification and code of dangerous goods))

«IIRill::.?'i: J:l. i »
((Occupational Safety and Health Act» (OSHA)

« &4t!J!Jit $1Ji))
«Toxic Substance Control Act)) (TSCA)

«i f!J:Fifli:.?'i: i »
((Consumer Product Safety Act)) (CPSA)

((# ;J;ftj'tf; $1J¥))
«Federal Environmental Pollution Control Act)) (FEPCA)

<CEI@fJ i *»
«The Oil Pollution Act)) (OPA)

((ifH 1t i iE*fD ;j;Ji *III(302/311/312/313)))
«superfund Amendments and Reauthorization Act TitleIII (302/311/312/313))) (SARA)

« ü!PLH:l(j *»
((Resource Conservation and Recovery Act)) (RCRA)

«:.?'i: txm 1M »
«safety Drinking Water Act)) (CWA)

«imfl'l65:/'l*»
((California Proposition 65))

«oonl t,!ü!»
((Code of Federal Regulations)) (CFR)

:t1t!rciiJifi # , 1+1fD±il!1rt' l.f 。
In accordance with all Federal, State and local laws.

16. Other information (1twLm,)

:<$::'.t11t1J.Mm :Jt1ri*:tlll Ui!:J, iftxl4tt ll!0oJ 1£1;#;00 ESi*:tlllWtji!:J,iftxl4tt ll!0oJ F 00 $'!!!.(WL0013-o m00 5tffi m :Jt1rm *ffi - t m• t o ffl1P ffmOO X#, * iE-001rtt ffl m. m m oomw m . r* wtt 0oJ(ITTW ffi&1fMfi {f 。

This file is only effective to the batteries (WL0013-3) provided by Winkind Company Limited. which manufactured by Winkind Company Limited. 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. GUANGDONG UTL CO., LTD. (UTL) doesn't assume responsibility for any damage or loss because of misuse of batteries.

Photos *JffJJt*

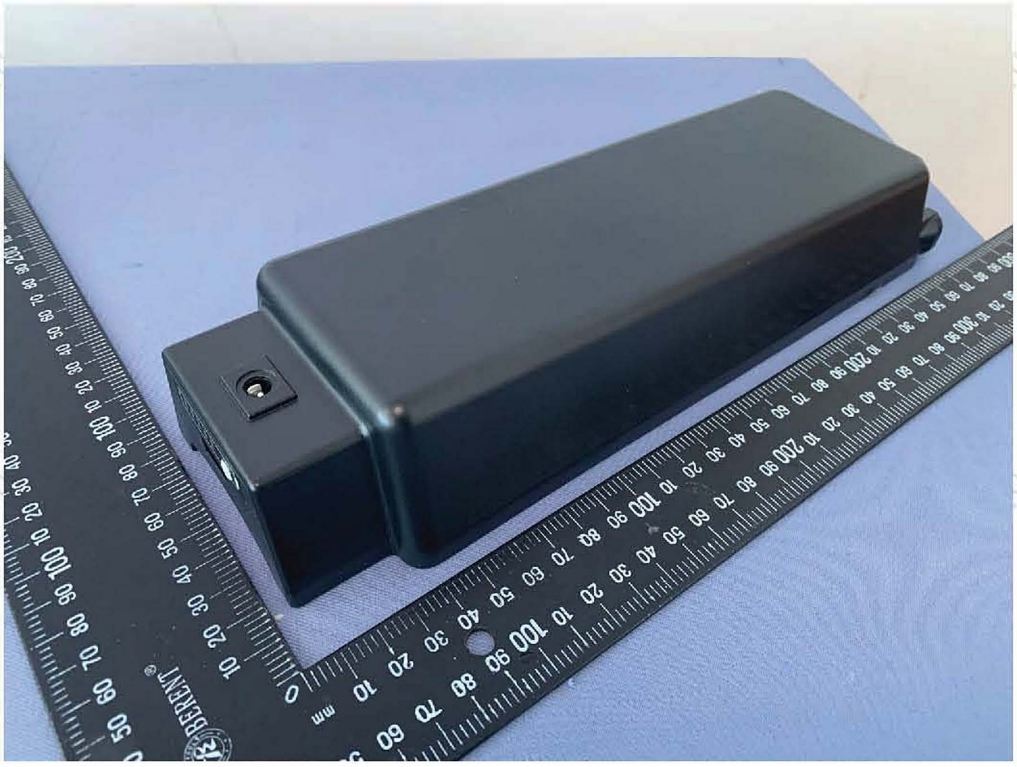

Figure 1 Overall view I of battery (Jrt!\!001)

Figure 2 Overall view Ⅱ of battery (Jrt!\!0011)

***Photos** Jfff)t*

Figure 3 Overall view of cell (Efl.Z)

Figure 4 Battery label (Efl.$tU.tff-)

Important

1. * .2fs>i,t#& mf IEI:@; ::ffij rJwZmJJti!! rJ* 1 i5。
Nobody is allowed to photocopy or partly photocopy this test report without written permission of UTL.

2. *l i5xffl:rfiA' *t Alz WliJ A x ,k。
The test report is invalid without the signatures of Approver, Reviewer and Tester.

3. *l i51 c&x ,k。
The test report is invalid if altered.

4. m #&*i5 n . @ *i5 B +E #&- o
Objections to the test report must be submitted to UTL within 15 days.

5. *l ']5tp ,8 1 {irt'J\,8o
Throughout this report a point is used as the decimal separator.

6. *1 i51JmJE £ffdr 。
The test report is valid for the tested samples only.

7. *1 i5#* tz-i,g:PJ $-fi•1ftffffl UTL1f1PJUTLB"J◆I◆, jf,sjtJF, tJFiP- 。
The test report does not grant applicant the use of UTL name, trademark or label.

8. 1f1PJttRr W1u•1fts"Jmfr1 1fm::f i?JI:1rl W1u•1iz:mc*lx W1uJifT4 s"J Wlu ffl。
UTL's liability under no circumstance will exceed the testing fee received from applicant for test conducted hereof this testing report.

9. Wlu1JP¥ □ :1!::fA◆fi?:mJ1JH1:.11=ffl。
The test data and results do not have social proof function.

****** 报告结束 **End of Test Report** ******