

**Test Report** No. CANEC2309245401 Date: 07 Aug 2023 Page 1 of 15

Client Name: LELON ELECTRONICS CORP./LELON ELECTRONICS (HUIZHOU) CO.,LTD./LELON

ELECTRONICS (SUZHOU) CO.,LTD./LELON ELECTRONICS TECHNOLOGY (SUZHOU)

CO.,LTD.

Client Address: 147, SEC. 1, GUOGUANG RD., DALI DISTRICT, TAICHUNG, TAIWAN

TAIYANG INDUSTRIAL ZONE, BAIHUA TOWN, HUIDONG COUNTY, HUIZHOU CITY,

GUANGDONG, CHINA

1220, ZHONGSHAN NORTH RD., WUJIANG ECONOMIC AND TECHNOLOGICAL DEVELOPMENT

ZONE SUZHOU CITY, JIANGSU, CHINA

788,XINZI ROAD, WUJIANG ECONOMIC TECHNOLOGICAL DEVELOPMENT ZONE,SUZHOU

CITY, JIANGSU, CHINA

Sample Name: Used for Aluminum Electrolytic Capacitors

Model No.: Axial Type

The above sample(s) and information were provided by the client.

\_\_\_\_\_\_

SGS Job No. : SZP23-009342 - SZ

Date of Sample Received: 26 Jul 2023

Testing Period: 26 Jul 2023 - 02 Aug 2023

Test Requested: Selected test(s) as requested by the client.

Test Method(s): Please refer to next page(s).

Test Result(s): Please refer to next page(s).

Result Summary:

Test Requested	Conclusion
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium and Hexavalent chromium	PASS
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)	PASS
Halogen	See Results
Phthalate(s)	See Results





No. CANEC2309245401

Date: 07 Aug 2023

Page 2 of 15

Signed for and on behalf of SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Coral Qiu

Coral Qiu

Approved Signatory







No. CANEC2309245401

Date: 07 Aug 2023

Page 3 of 15

Test Result(s):

## **Test Part Description:**

Specimen No.	SGS Sample ID	Description
SN1	CAN23-092454.001	Gray metal(said to be AL FOIL)
SN2	CAN23-092454.002	Silvery metal(said to be AL CASE)
SN3	CAN23-092454.003	Silvery plated metal pin(said to be LEAD WIRE)
SN4	CAN23-092454.004	Silvery metal foil(said to be TAB)
SN5	CAN23-092454.005	Silvery plated metal(said to be AL LID)
SN6	CAN23-092454.006	Silvery plated metal(said to be MOUNTING HOLES)
SN7	CAN23-092454.007	White paper(said to be ELECTROLYTIC PAPER)
SN8	CAN23-092454.008	Colorless transparent adhesive tape(said to be ADHESIVE TAPE)
SN9	CAN23-092454.009	Black rubber(said to be RUBBER GASKET)
SN10	CAN23-092454.010	Light yellow liquid(said to be ELECTROLYTE GBL)

#### Remarks:

- (1) 1 mg/kg = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected ( < MDL)
- (4) "-" = Not Regulated

# EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium and Hexavalent chromium

Test Method: With reference to IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-7-1:2015, analyzed by ICP-OES and UV-Vis.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>	<u>002</u>	<u>003</u>
Cadmium (Cd)	100	mg/kg	2	ND	ND	ND
Lead (Pb)	1000	mg/kg	2	ND	6	ND
Mercury (Hg)	1000	mg/kg	2	ND	ND	ND
Hexavalent Chromium (Cr(VI))▼	-	µg/cm²	0.10	ND	ND	ND
Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>004</u>	<u>005</u>	<u>006</u>
Cadmium (Cd)	100	mg/kg	2	ND	ND	ND
Lead (Pb)	1000	mg/kg	2	ND	13	ND
Mercury (Hg)	1000	mg/kg	2	ND	ND	ND
Hexavalent Chromium (Cr(VI))▼	-	µg/cm²	0.10	ND	ND	ND

#### Notes:



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/en/Terms-and-Conditions">https://www.sgs.com/en/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 中国・广东・广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 www.sgsgroup.com.cn t (86–20) 82155555 sgs.china@sgs.com



**Test Report** No. CANEC2309245401 Date: 07 Aug 2023 Page 4 of 15

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series
- (3) ▼= a. The sample is positive for CrVI if the CrVI concentration is greater than 0.13 µg/cm². The sample coating is considered to contain CrVI
  - b. The sample is negative for CrVI if CrVI is ND (concentration less than 0.10 μg/cm²). The coating is considered a non-CrVI based coating
  - c. The result between 0.10  $\mu g/cm^2$  and 0.13  $\mu g/cm^2$  is considered to be inconclusive unavoidable coating variations may influence the determination

Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.

EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)

Test Method: With reference to IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017, IEC 62321-6:2015 and IEC 62321-8:2017, analyzed by ICP-OES, UV-Vis and GC-MS.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>007</u>	<u>008</u>	<u>009</u>
Cadmium (Cd)	100	mg/kg	2	ND	ND	ND
Lead (Pb)	1000	mg/kg	2	ND	ND	8
Mercury (Hg)	1000	mg/kg	2	ND	ND	ND
Hexavalent Chromium (CrVI)	1000	mg/kg	8	ND	ND	ND
Sum of PBBs	1000	mg/kg	-	ND	ND	ND
Monobromobiphenyl	-	mg/kg	5	ND	ND	ND
Dibromobiphenyl	-	mg/kg	5	ND	ND	ND
Tribromobiphenyl	-	mg/kg	5	ND	ND	ND
Tetrabromobiphenyl	-	mg/kg	5	ND	ND	ND
Pentabromobiphenyl	-	mg/kg	5	ND	ND	ND
Hexabromobiphenyl	-	mg/kg	5	ND	ND	ND
Heptabromobiphenyl	-	mg/kg	5	ND	ND	ND
Octabromobiphenyl	-	mg/kg	5	ND	ND	ND
Nonabromobiphenyl	-	mg/kg	5	ND	ND	ND
Decabromobiphenyl	-	mg/kg	5	ND	ND	ND
Sum of PBDEs	1000	mg/kg	-	ND	ND	ND
Monobromodiphenyl ether	-	mg/kg	5	ND	ND	ND
Dibromodiphenyl ether	-	mg/kg	5	ND	ND	ND
Tribromodiphenyl ether	-	mg/kg	5	ND	ND	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND	ND	ND
Pentabromodiphenyl ether	-	mg/kg	5	ND	ND	ND
Hexabromodiphenyl ether	-	mg/kg	5	ND	ND	ND



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/en/Terms-and-Conditions">https://www.sgs.com/en/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN. Doccheck@sgs.com

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 中国・广东・广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 www.sgs t (86–20) 82155555 sgs.china



Test Report	No. CANEC2309245401		Date: 0	7 Aug 20	Page 5 of 15	
Test Item(s)	<u>Limit</u>	<u>Unit</u>	MDL	<u>007</u>	<u>008</u>	<u>009</u>
Heptabromodiphenyl ether		mg/kg	5	ND	ND	ND
Octabromodiphenyl ether	-	mg/kg	5	ND	ND	ND
Nonabromodiphenyl ether	_	mg/kg	5	ND	ND	ND
Decabromodiphenyl ether	-	mg/kg	5	ND	ND	ND
Dibutyl phthalate (DBP)	1000	mg/kg	50	ND	ND	ND
Butyl benzyl phthalate (BBP)	1000	mg/kg	50	ND	ND	ND
Bis (2-ethylhexyl) phthalate (DEHP)	1000	mg/kg	50	ND	ND	ND
Diisobutyl Phthalates (DIBP)	1000	mg/kg	50	ND	ND	ND
Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>010</u>		
Cadmium (Cd)	100	mg/kg	2	ND		
Lead (Pb)	1000	mg/kg	2	ND		
Mercury (Hg)	1000	mg/kg	2	ND		
Hexavalent Chromium (CrVI)	1000	mg/kg	8	ND		
Sum of PBBs	1000	mg/kg	-	ND		
Monobromobiphenyl	-	mg/kg	5	ND		
Dibromobiphenyl	-	mg/kg	5	ND		
Tribromobiphenyl	-	mg/kg	5	ND		
Tetrabromobiphenyl	-	mg/kg	5	ND		
Pentabromobiphenyl	-	mg/kg	5	ND		
Hexabromobiphenyl	-	mg/kg	5	ND		
Heptabromobiphenyl	-	mg/kg	5	ND		
Octabromobiphenyl	-	mg/kg	5	ND		
Nonabromobiphenyl	-	mg/kg	5	ND		
Decabromobiphenyl	-	mg/kg	5	ND		
Sum of PBDEs	1000	mg/kg	-	ND		
Monobromodiphenyl ether	-	mg/kg	5	ND		
Dibromodiphenyl ether	-	mg/kg	5	ND		
Tribromodiphenyl ether	-	mg/kg	5	ND		
Tetrabromodiphenyl ether	-	mg/kg	5	ND		
Pentabromodiphenyl ether	-	mg/kg	5	ND		
Hexabromodiphenyl ether	-	mg/kg	5	ND		
Heptabromodiphenyl ether	-	mg/kg	5	ND		
Octabromodiphenyl ether	-	mg/kg	5	ND		
Nonabromodiphenyl ether	-	mg/kg	5	ND		
Decabromodiphenyl ether	-	mg/kg	5	ND		
Dibutyl phthalate (DBP)	1000	mg/kg	50	ND		
Butyl benzyl phthalate (BBP)	1000	mg/kg	50	ND		
Bis (2-ethylhexyl) phthalate (DEHP)	1000	mg/kg	50	ND		



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/en/Terms-and-Conditions">https://www.sgs.com/en/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 中国・广东・广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 www t (86–20) 82155555 sgs.

www.sgsgroup.com.cn sgs.china@sgs.com



**Test Report** No. CANEC2309245401 Date: 07 Aug 2023 Page 6 of 15

Test Item(s) <u>Limit Unit MDL 010</u>
Diisobutyl Phthalates (DIBP) 1000 mg/kg 50 ND

#### Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series
- (3) The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.

## <u>Halogen</u>

Test Method: With reference to EN 14582:2016, analysis was performed by IC.

Test Item(s) Chlorine (CI) Bromine (Br)	<u>Unit</u>	MDL	<u>007</u>	<u>008</u>	<i>009</i>
	mg/kg	50	ND	ND	71
	mg/kg	50	ND	ND	ND
Test Item(s) Chlorine (CI) Bromine (Br)	<u>Unit</u> mg/kg mg/kg	MDL 50 50	<u>010</u> ND ND		

### Phthalate(s)

Test Method: With reference to IEC 62321-8:2017, analysis was performed by GC-MS.

Test Item(s)	CAS NO.	<u>Unit</u>	<u>MDL</u>	<u>007</u>
Diisononyl Phthalate (DINP)	28553-12-0 /	%(w/w)	0.005	ND
	68515-48-0			
Test Item(s)	CAS NO.	<u>Unit</u>	<u>MDL</u>	008
Diisononyl Phthalate (DINP)	28553-12-0 /	%(w/w)	0.005	ND
	68515-48-0			
Test Item(s)	CAS NO.	<u>Unit</u>	<u>MDL</u>	<u>009</u>
Diisononyl Phthalate (DINP)	28553-12-0 /	%(w/w)	0.005	ND
	68515-48-0			



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/en/Terms-and-Conditions">https://www.sgs.com/en/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.198、Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 中国・广东・广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 www.sgsgroup.com.cn t (86–20) 82155555 sgs.china@sgs.com



**Test Report** No. CANEC2309245401 Date: 07 Aug 2023 Page 7 of 15

 Test Item(s)
 CAS NO.
 Unit
 MDL
 010

 Diisononyl Phthalate (DINP)
 28553-12-0 / (8515-48-0)
 %(w/w)
 0.005
 ND

Remark: Results & photo(s) of 001/007/008/010 in this report refer to 001/004/005/018 in test report CANEC2308865200

Results & photo(s) of 004 in this report refer to 004 in test report CANEC2309065500.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019.





No. CANEC2309245401

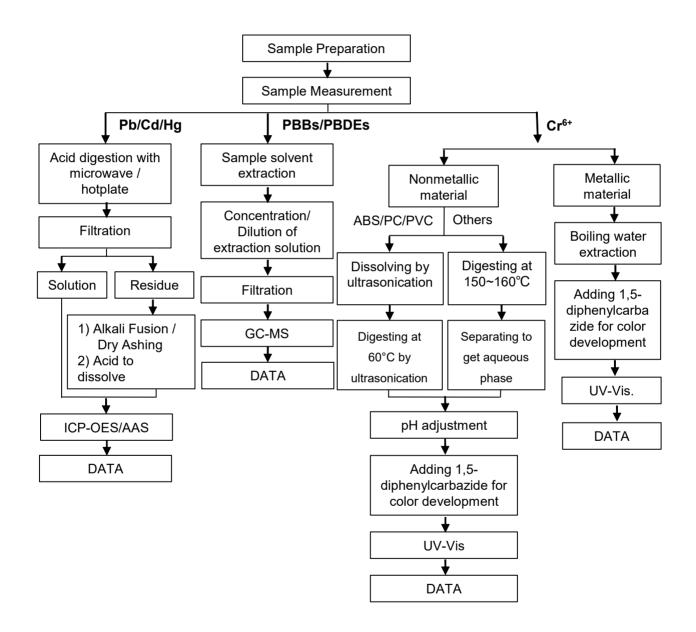
Date: 07 Aug 2023

Page 8 of 15

#### **ATTACHMENTS**

## Pb/Cd/Hg/Cr6+/PBBs/PBDEs Testing Flow Chart

1) These samples were dissolved totally by pre -conditioning method according to below flow chart. (Cr<sup>6+</sup> and PBBs/PBDEs test method excluded).







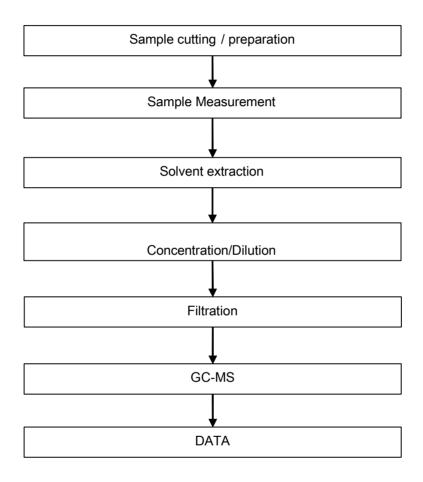
No. CANEC2309245401

Date: 07 Aug 2023 P

Page 9 of 15

## **ATTACHMENTS**

## **Phthalates Testing Flow Chart**







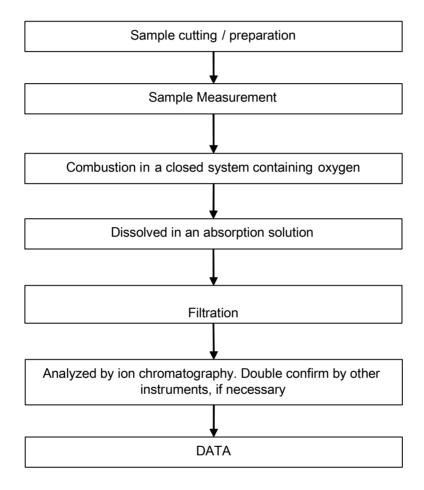
No. CANEC2309245401

Date: 07 Aug 2023

Page 10 of 15

## **ATTACHMENTS**

# **Halogen Testing Flow Chart**







No. CANEC2309245401

Page 11 of 15

Date: 07 Aug 2023

Sample photo:





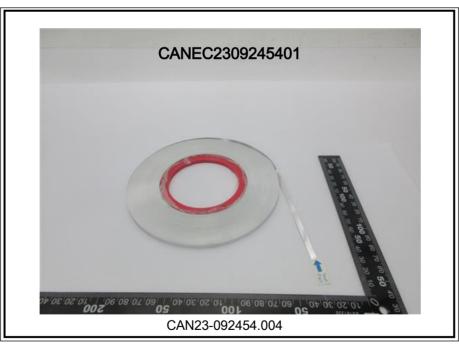




No. CANEC2309245401

Date: 07 Aug 2023 Page 12 of 15







Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/en/Terms-and-Conditions">https://www.sgs.com/en/Terms-and-Conditions</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 中国・广东・广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 t (86–20) 82155555 www.sgsgroup.com.cn sgs.china@sgs.com



No. CANEC2309245401

Date: 07 Aug 2023 Page 13 of 15



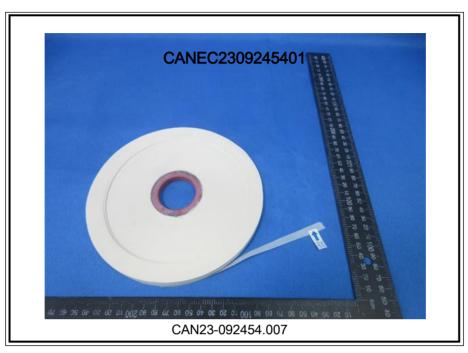






No. CANEC2309245401

Date: 07 Aug 2023 Page 14 of 15









No. CANEC2309245401

Date: 07 Aug 2023

Page 15 of 15





SGS authenticate the photo on original report only

\*\*\* End of Report \*\*\*

