Prüfbericht - Produkte
Test Report - Products

TÜVRheinland®

Prüfbericht-Nr.: *Test report no.:*	CN24SGIM 001	**Auftrags-Nr.:** *Order no.*:	168472301	Seite 1 von 43 *Page 1 of* 43
Kunden-Referenz-Nr.: *Client reference no.*:	N/A	**Auftragsdatum:** *Order date:*	2024-03-04	
Auftraggeber: *Client*:	Lianying Technology (Shenzhen) Co., Ltd. C1, 24th Floor, Building 12, Le Hui Center, Jihua Road, Bantian Street, Longgang District, Shenzhen, Guangdong, P.R. China			
Prüfgegenstand: *Test item*:	Coin Manganese Dioxide Lithium Battery			
Bezeichnung / Typ-Nr.: *Identification / Type no.*:	CR1216, CR1220, CR1225, CR1616, CR1632, CR2016, CR2025, CR2032, CR2412, CR2430, CR2450, CR2477, CR3032			
Auftrags-Inhalt: *Order content*:	Certificate of conformity			
Prüfgrundlage: *Test specification*:	REGULATION (EU) 2023/1542 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 12 July 2023			
Wareneingangsdatum: *Date of sample receipt*:	2024-02-29	See Attachment 2 for photo documentation		
Prüfmuster-Nr.: *Test sample no:*	A003666133-001~011			
Prüfzeitraum: *Testing period*:	2024-03-06 - 2024-03-20			
Ort der Prüfung: *Place of testing*:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: *Test result**:	Pass			

erstellt von: created by:	Grid Guo	**genehmigt von:** *authorized by*:	Joe Wang
Datum: *Date:* 2024-04-09		**Ausstellungsdatum:** *Issue date:* 2024-04-09	
Stellung / Position:	Engineer	**Stellung** / Position:	Reviewer

Sonstiges / *Other*:

Articles 6, 18-20 of (EU) 2023/1542 evaluated in this report, valid until 2025.08.17.

This report does not evidence compliance of the provided sample with the relevant standards but only with the referred tests. This test report documents the findings of examination conducted on the delivered product mentioned above only. This report does not entitle the applicant to carry any safety mark on this or similar products. Further for sales or other application purposes of the tested product, any reference to TÜV Rheinland or a test through TÜV Rheinland is only permissible with prior written consent of TÜV Rheinland.

Zustand des Prüfgegenstandes bei Anlieferung: *Condition of the test item at delivery*: Prüfmuster vollständig und unbeschädigt *Test item complete and undamaged*

* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
** Legend:*	*P(ass) = passed a.m. test specification(s)*	*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

V05

Anmerkungen
Remarks

1	Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben. Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden. *The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system.* *Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.*
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3	Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt. *Test clauses with remark of * are subcontracted to qualified subcontractors and descripted under the respective test clause in the report.* *Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.*
4	Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnisen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezueglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. *The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.*

TEST REPORT

REGULATION (EU) 2023/1542 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 12 July 2023 concerning batteries and waste batteries, amending Directive 2008/98/EC and Regulation (EU) 2019/1020 and repealing Directive 2006/66/EC

Report Number. .....:	CN24SGIM 001
Date of issue .....:	See cover page
Total number of pages.....	See cover page
Testing location .....:	TÜV Rheinland (Shenzhen) Co., Ltd. 1F East & 3F West -4F, Cybio Technology Building No.1, No.16 Kejibei 2nd Road, High-Tech Industrial Park North Nanshan District, 518057, Shenzhen, China
Testing Laboratory.....:	TÜV Rheinland (Shenzhen) Co., Ltd.
Applicant's name.....:	See cover page
Address .....:	See cover page
Test specification:	
Standard .....:	See cover page
Test procedure .....:	See cover page
Non-standard test method.....:	N/A
Test Report Form No.....:	Rev. 2023-08-21
Test Report Form(s) Originator ....:	TÜV Rheinland (Shenzhen) Co., Ltd.
Master TRF .....:	Dated 2023-09

List of Attachments (including a total number of pages in each attachment):

-Attachment 1: Chemical report 168472301a 001 (17 pages).
-Attachment 2: Photo documentation (1 page).

Test item particulars:

Information about the product needed to establish a correct test program, such as product mobility, type of power connections and similar.	(Test item particulars are selected by the TRF Originator base on the requirements in the standard)
Test item description ..... :	Coin Manganese Dioxide Lithium Battery
Battery Category ..... :	Portable battery
Trade mark..... ..... :	LYNKCELL NECTIUM 联应 传应
Manufacturer ..... :	Same as client in cover page
Factory ..... :	Fujian Nanping Nanfu New Energy Co., Ltd. 109# Industry Road, Yanpin District, Nanping City, Fujian, P.R. China
Model/Type reference ..... :	CR1216, CR1220, CR1225, CR1616, CR1632, CR2016, CR2025, CR2032, CR2412, CR2430, CR2450, CR2477, CR3032
Portable battery of general use ..... :	☒ Yes ☐ No
Stationary battery energy storage system ..... :	☐ Yes ☒ No

General remarks:

This report shall not be reproduced, except in full, without the written approval of the testing laboratory.
The test results presented in this report relate only to the object tested.
"(see remark #)" refers to a remark appended to the report.
"(see appended table)" refers to a table appended to the report.
Throughout this report a point is used as the decimal separator.

General product information and other remarks:

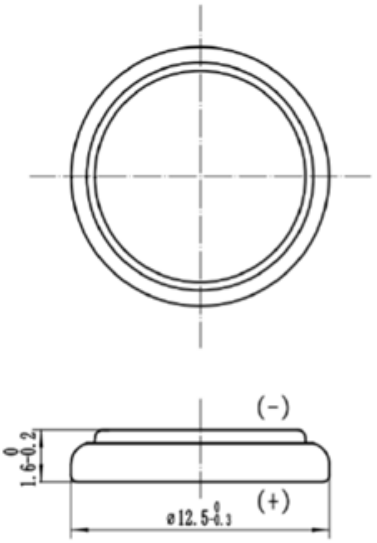
The batteries **CR1216, CR1220, CR1225, CR1616, CR1632, CR2016, CR2025, CR2032, CR2412, CR2430, CR2450, CR2477, CR3032** are constructed of the positive electrode, negative electrode, separator, electrolyte, steel can, current collector and assembled sealing cap. The positive and negative electrodes are housed in the can in the state being separated by the separator, and the assembled sealing cap is fit to the can.

The manufacturer declares that all the models are identical (same material, same manfacturing process, same construction), except the dimension. CR2450 is chosen as representative to be tested in this report.

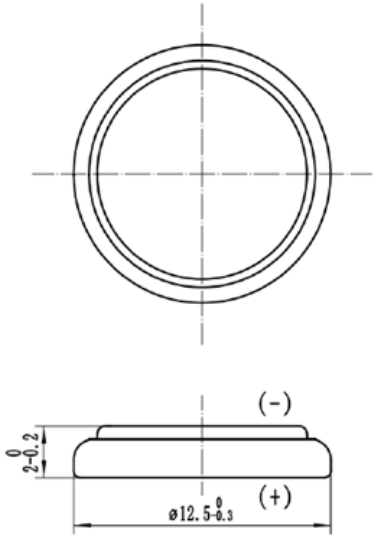
The main features of the battery are shown as below:

Model	Nominal capacity	Nominal voltage	Discharge cut-off voltage
CR1216	25mAh	3.0V	2.0V
CR1220	40mAh	3.0V	2.0V
CR1225	50mAh	3.0V	2.0V
CR1616	50mAh	3.0V	2.0V
CR1632	140mAh	3.0V	2.0V
CR2016	90mAh	3.0V	2.0V
CR2025	165mAh	3.0V	2.0V
CR2032	240mAh	3.0V	2.0V
CR2412	100mAh	3.0V	2.0V
CR2430	300mAh	3.0V	2.0V
CR2450	600mAh	3.0V	2.0V
CR2477	1000mAh	3.0V	2.0V
CR3032	500mAh	3.0V	2.0V

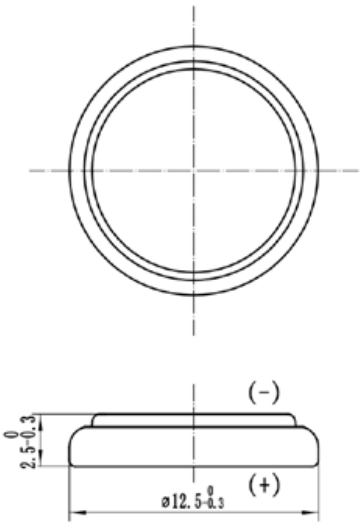
Construction:



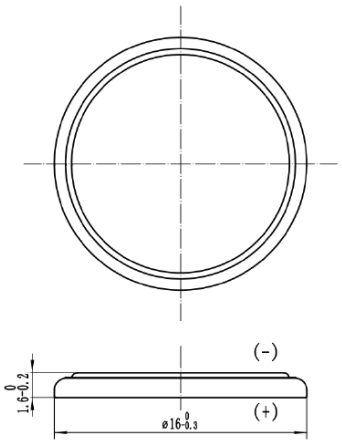
CR1216 (unit: mm)



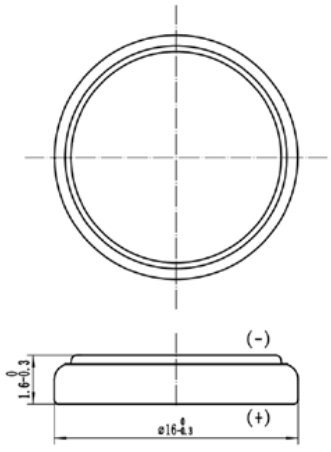
CR1220 (unit: mm)



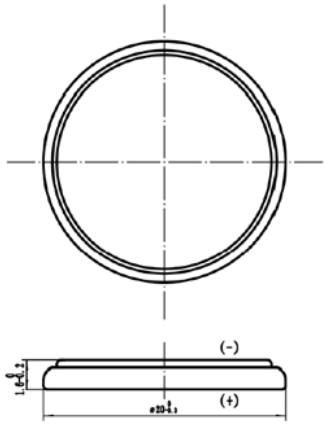
CR1225 (unit: mm)



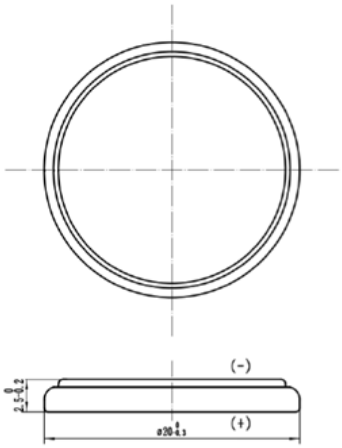
CR1616 (unit: mm)



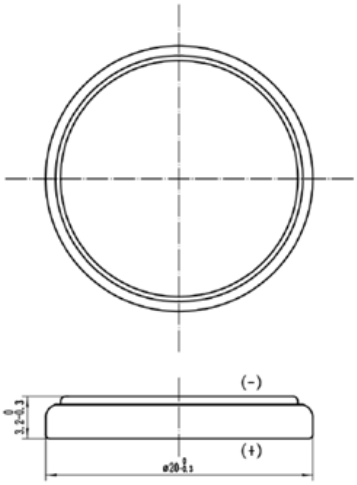
CR1632 (unit: mm)



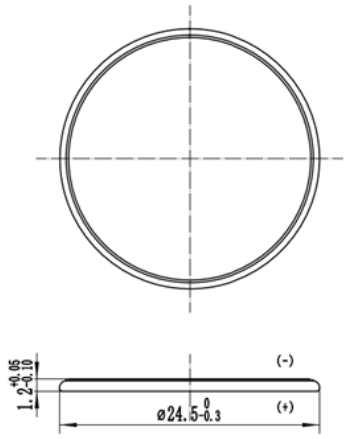
CR2016 (unit: mm)



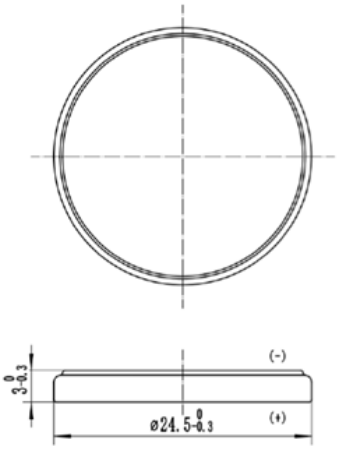
CR2025 (unit: mm)



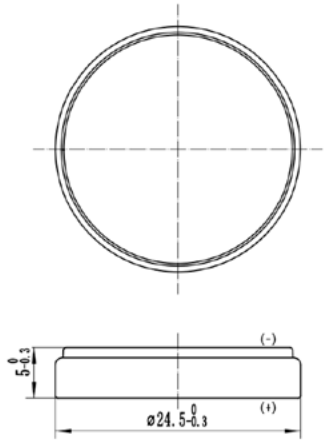
CR2032 (unit: mm)



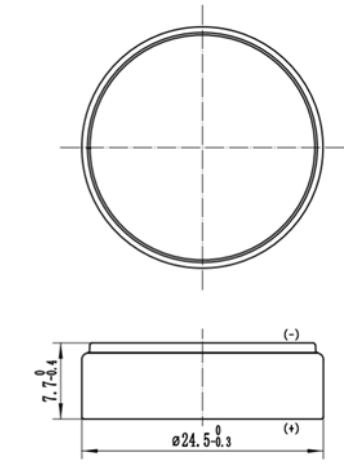
CR2412 (unit: mm)



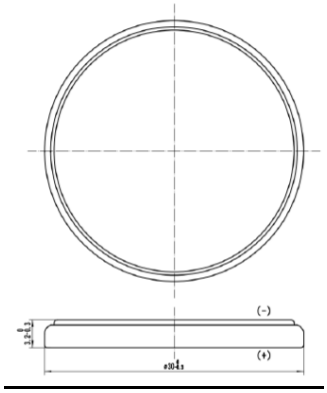
CR2430 (unit: mm)



CR2450 (unit: mm)



CR2477 (unit: mm)



CR3032 (unit: mm)

Circuit diagram:

N/A, cell only

Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorize d by the respective NCBs that own these marks

CR1216 cell marking

Product: Lithium Primary Batterry	Spec.: CR1216-25mAh
Qutity: 8000pcs	Code: 100104190003
Manufacture date: 2024.XX.XX	
Manufacturer: Fujian Nanping Nanfu New Energy co.,ltd. Address: No. 109, Industrial Road, Yanping District, Nanping City, Fujian Province	
Importer:XXX Address: XXX	

Immediate package label for CR1216

CR1220 cell marking

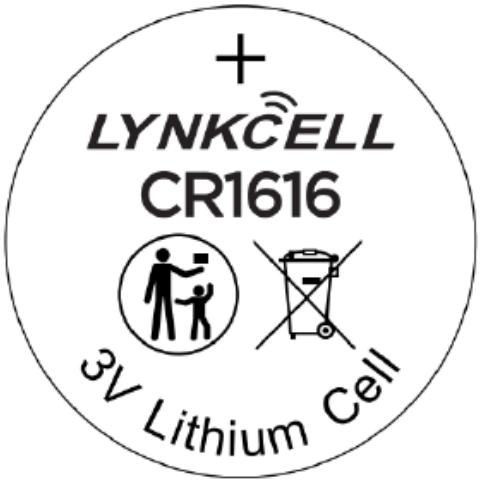
Product: Lithium Primary Batterry	Spec.: CR1220-40mAh-X
Qutity: 4800 pcs	Code: 100104030012
Manufacture date: 2024.XX.XX	
Manufacturer: Fujian Nanping Nanfu New Energy co.,ltd. Address: No. 109, Industrial Road, Yanping District, Nanping City, Fujian Province	
Importer:XXX Address: XXX	

Immediate package label for CR1220

CR1225 cell marking

Product: Lithium Primary Batterry	Spec.: CR1225-UNZEZ-G(1.0000)
Qutity: 10000 pcs	Code: 100104030029
Manufacture date: 2024.XX.XX	
Manufacturer: Fujian Nanping Nanfu New Energy co.,ltd. Address: No. 109, Industrial Road, Yanping District, Nanping City, Fujian Province	
Importer:XXX Address: XXX	

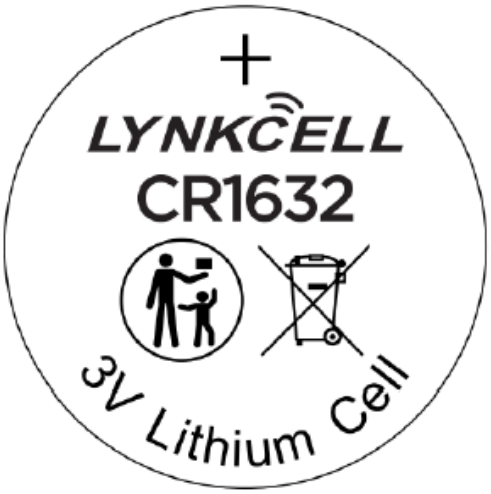
Immediate package label for CR1225



CR1616 cell marking

Product: Lithium Primary Batterry	Spec.: CR1616-50mAh-x
Qutity: 6500 pcs	Code: 100104050009
Manufacture date: 2024.XX.XX	CE
Manufacturer: Fujian Nanping Nanfu New Energy co.,ltd. Address: No. 109, Industrial Road, Yanping District, Nanping City, Fujian Province	
Importer:XXX Address: XXX	

Immediate package label for CR1616



CR1632 cell marking

Product: Lithium Primary Batterry	Spec.: CR1632-140mAh-003X
Qutity: 4000 pcs	Code: 100104070031
Manufacture date: 2024.XX.XX	CE
Manufacturer: Fujian Nanping Nanfu New Energy co.,ltd. Address: No. 109, Industrial Road, Yanping District, Nanping City, Fujian Province	
Importer:XXX Address: XXX	

Immediate package label for CR1632

CR2016 cell marking

Product: Lithium Primary Batterry	Spec.: CR2016-90mAh-N
Qutity: 6000 pcs	Code: 100104090034
Manufacture date: 2024.XX.XX	CE
Manufacturer: Fujian Nanping Nanfu New Energy co.,ltd. Address: No. 109, Industrial Road, Yanping District, Nanping City, Fujian Province	
Importer:XXX Address: XXX	

Immediate package label for CR2016

CR2025 cell marking

Product: Lithium Primary Batterry	Spec.: CR2025-NECTIUM
Qutity: 4000 pcs	Code: 100104100037
Manufacture date: 2024.XX.XX	CE
Manufacturer: Fujian Nanping Nanfu New Energy co.,ltd. Address: No. 109, Industrial Road, Yanping District, Nanping City, Fujian Province	
Importer:XXX Address: XXX	

Immediate package label for CR2025

CR2032 cell marking

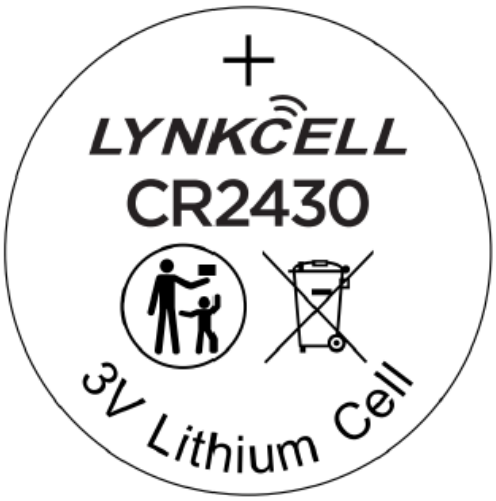
Product: Lithium Primary Batterry	Spec.: CR2032-pulse-NECTIUM(0.32)
Qutity: 3200 pcs	Code: 100104110100
Gross weight : 11.4Kg	Net weight: 9.6Kg
Size: 0.315×0.315×0.190=0.019m³	CE
Manufacture date: 2024.XX.XX	
Manufacturer: Fujian Nanping Nanfu New Energy co.,ltd. Address: No. 109, Industrial Road, Yanping District, Nanping City, Fujian Province	
Importer:XXX Address: XXX	

Immediate package label for CR2032

CR2412 cell marking

Product: Lithium Primary Batterry	Spec.: CR2412-UNAZZ-022(0.2400)
Qutity: 2400pcs	Code: 100104270001
Manufacture date: 2024.XX.XX	CE
Manufacturer: Fujian Nanping Nanfu New Energy co.,ltd. Address: No. 109, Industrial Road, Yanping District, Nanping City, Fujian Province	
Importer:XXX Address: XXX	

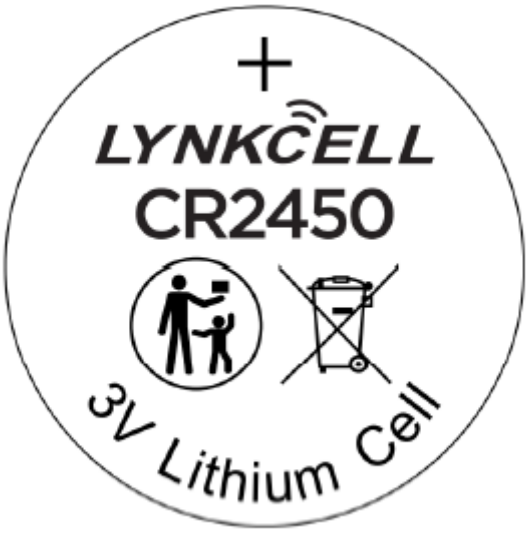
Immediate package label for CR2412



CR2430 cell marking

Product: Lithium Primary Batterry	Spec.: CR2430-UNZGE-X(0.5600)
Qutity: 5600 pcs	Code: 100104120029
Manufacture date: 2024.XX.XX	CE
Manufacturer: Fujian Nanping Nanfu New Energy co.,ltd. Address: No. 109, Industrial Road, Yanping District, Nanping City, Fujian Province	
Importer:XXX Address: XXX	

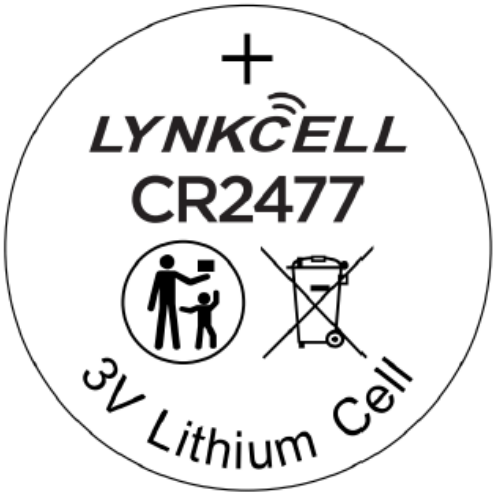
Immediate package label for CR2430



CR2450 cell marking

Product: Lithium Primary Batterry	Spec.: CR2450-pulse-UNFZZ-003(0.1600)
Qutity: 1600 pcs	Code: 100104130087
Gross weight : 11.5Kg	Net weight: 10.4Kg
Size: 0.313×0.313×0.156=0.015m³	CE
Manufacture date: 2024.XX.XX	
Manufacturer: Fujian Nanping Nanfu New Energy co.,ltd. Address: No. 109, Industrial Road, Yanping District, Nanping City, Fujian Province	
Importer:XXX Address: XXX	

Immediate package label for CR2450



CR2477 cell marking

Product: Lithium Primary Batterry	Spec.: CR2477-UNAZZZ
Qutity: 1600 pcs	Code: 100104160001
Manufacture date: 2024.XX.XX	CE
Manufacturer: Fujian Nanping Nanfu New Energy co.,ltd. Address: No. 109, Industrial Road, Yanping District, Nanping City, Fujian Province	
Importer:XXX Address: XXX	

Immediate package label for CR2477

CR3032 cell marking

Product: Lithium Primary Battery	Spec.: CR3032-500MAH
Qutity: 1600 pcs	Code: 100104200003
Manufacture date: 2024.XX.XX	CE
Manufacturer: Fujian Nanping Nanfu New Energy co.,ltd. Address: No. 109, Industrial Road, Yanping District, Nanping City, Fujian Province	
Importer:XXX Address: XXX	

Immediate package label for CR3032

Remark:

1. The height of the CE marking at least 5mm.
2. Name and address of the manufacturer and importer are shown on the immediate package.
3. “2024.XX.XX” marked on the immediate package represents the date of manufacture.
4. Cell has four optional trademark markings, see page 4 for details

2023/1542 EU			
Clause	Requirement + Test	Result - Remark	Verdict

Chapter I	**General provisions**		P
Chapter II	**Sustainability and safety requirements**		P
Article 6	**Restrictions on substances**		P
1.	In addition to the restrictions set out in Annex XVII to Regulation (EC) No 1907/2006 and in Article 4(2), point (a), of Directive 2000/53/EC, batteries shall not contain substances for which Annex I to this Regulation contains a restriction unless the conditions of that restriction are complied with.	See Attachment 1.	P
2.	In the event of an unacceptable risk to human health or the environment, arising from the use of a substance in the manufacture of batteries or from the presence of a substance in the batteries when they are placed on the market, or arising during their subsequent life cycle stages, including during repurposing or the treatment of waste batteries, that is not adequately controlled and needs to be addressed on a Union-wide basis, the Commission shall adopt a delegated act in accordance with Article 89 to amend the restrictions in Annex I, pursuant to the procedure laid down in Articles 86, 87 and 88.		P
3.	Restrictions adopted pursuant to paragraph 2 of this Article shall not apply to the use of a substance in scientific research and development as defined in Article 3, point (23), of Regulation (EC) No 1907/2006, carried out in relation to batteries.		P
4.	Where a restriction adopted pursuant to paragraph 2 of this Article does not apply to product and process orientated research and development, as defined in Article 3, point (22), of Regulation (EC) No 1907/2006, that exemption, as well as the maximum quantity of the substance exempted, shall be specified in Annex I to this Regulation.		N/A
5.	By 31 December 2027, the Commission, assisted by the European Chemicals Agency set up under Regulation (EC) No 1907/2006 ('the Agency'), shall prepare a report on substances of concern, namely substances having an adverse effect on human health or the environment or hampering recycling for safe and high quality secondary raw materials, present in batteries or used in their manufacture. The Commission shall submit that report to the European Parliament and to the Council detailing its findings and shall consider the appropriate follow-up measures including the adoption of delegated acts as referred to in paragraph 2 of this Article.		N/A
Article 7	**Carbon footprint of electric vehicle batteries, rechargeable industrial batteries and LMT batteries**	Not applicable to portable batteries.	N/A
Article 8	**Recycled content in industrial batteries, electric vehicle batteries, LMT batteries and SLI batteries**	Not applicable to portable batteries.	N/A
Article 9	**Performance and durability requirements for portable batteries of general use**		P

2023/1542 EU			
Clause	Requirement + Test	Result - Remark	Verdict
1.	From 18 August 2028 or 24 months after the date of entry into force of the delegated act referred to in paragraph 2, whichever is the latest, portable batteries of general use, excluding button cells, shall meet the minimum values for the electrochemical performance and durability parameters set out in Annex III as laid down in the delegated act adopted pursuant to paragraph 2.	Not request by client. Not mandatory until the specified date.	N/A
2.	By 18 August 2027, the Commission shall adopt a delegated act in accordance with Article 89 to supplement this Regulation by establishing mandatory minimum values for the electrochemical performance and durability parameters set out in Annex III for portable batteries of general use, excluding button cells.		N/A
	The Commission is empowered to adopt delegated acts in accordance with Article 89 to amend the minimum values referred to in the first subparagraph or add electrochemical performance and durability parameters to those set out in Annex III in view of technical and scientific progress.		N/A
	In preparing the delegated act referred to in the first subparagraph, the Commission shall consider the need to reduce the life cycle environmental impact of portable batteries of general use, including by means of increasing the resource efficiency thereof, and shall take into consideration relevant international standards and labelling schemes.		N/A
	The Commission shall also ensure that the provisions laid down by the delegated act referred to in the first subparagraph do not have a significant adverse impact on the safety and functionality of those batteries or the appliances, light means of transport or other vehicles into which those batteries are incorporated, the affordability and the cost for end-users and the industry's competitiveness.		N/A
3.	By 31 December 2030, the Commission shall assess the feasibility of measures to phase out non-rechargeable portable batteries of general use with a view to minimising their environmental impact based on the life cycle assessment methodology and viable alternatives for end-users. To that end, the Commission shall submit a report to the European Parliament and to the Council and consider taking the appropriate measures, including the adoption of legislative proposals for either the phase out or the setting of eco-design requirements.		N/A
Article 10	**Performance and durability requirements for rechargeable industrial batteries, LMT batteries and electric vehicle batteries**	Not applicable to portable batteries.	N/A
1.	From 18 August 2024, rechargeable industrial batteries with a capacity greater than 2 kWh, LMT batteries and electric vehicle batteries shall be accompanied by a document containing values for the electrochemical performance and durability parameters set out in Part A of Annex IV.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	For batteries referred to in the first subparagraph, the technical documentation referred to in Annex VIII shall contain an explanation of the technical specifications, standards and conditions used to measure, calculate or estimate the values for the electrochemical performance and durability parameters. That explanation shall include, at least, the elements set out in Part B of Annex IV.		N/A
2.	From either 18 August 2027 or 18 months after the date of entry into force of the delegated act referred to in the first subparagraph of paragraph 5, whichever is the latest, rechargeable industrial batteries with a capacity greater than 2 kWh, except those with exclusively external storage, shall meet the minimum values laid down in the delegated act adopted pursuant to the first subparagraph of paragraph 5 for the electrochemical performance and durability parameters set out in Part A of Annex IV.		N/A
3.	From either 18 August 2028 or 18 months after the date of entry into force of the delegated act referred to in the second subparagraph of paragraph 5, whichever is the latest, LMT batteries shall meet the minimum values laid down in the delegated act adopted pursuant to the second subparagraph of paragraph 5 for the electrochemical performance and durability parameters set out in Part A of Annex IV.		N/A
4.	Paragraphs 1, 2 and 3 shall not apply to a battery that has been subject to preparation for re-use, preparation for repurposing, repurposing or remanufacturing, where the economic operator placing that battery on the market or putting it into service demonstrates that the battery, before undergoing such operations, has been placed on the market or put into service before the dates on which those obligations become applicable in accordance with those paragraphs.		N/A
5.	By 18 February 2026, the Commission shall adopt a delegated act in accordance with Article 89 to supplement this Regulation by establishing minimum values for the electrochemical performance and durability parameters set out in Part A of Annex IV that rechargeable industrial batteries with a capacity greater than 2 kWh, except those with exclusively external storage, shall attain.		N/A
	By 18 February 2027, the Commission shall adopt a delegated act in accordance with Article 89 to supplement this Regulation by establishing minimum values for the electrochemical performance and durability parameters set out in Part A of Annex IV that LMT batteries shall attain.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	In preparing the delegated acts referred to in the first and second subparagraph, the Commission shall consider the need to reduce the life cycle environmental impact of rechargeable industrial batteries with a capacity greater than 2 kWh, except of those with exclusively external storage, and of LMT batteries, and ensure that the requirements laid down therein do not have a significant adverse impact on the functionality of those batteries or the appliances, light means of transport or other vehicles into which those batteries are incorporated, their affordability and industry's competitiveness.		N/A
6.	The Commission is empowered to adopt delegated acts in accordance with Article 89 to amend the electrochemical performance and durability parameters set out in Annex IV in light of market developments and technical and scientific progress, including, in particular, related to technical specifications of the informal UNECE Working Group on Electric Vehicles and the Environment.		N/A
Article 11	**Removability and replaceability of portable batteries and LMT batteries**	To be evaluated with end product.	N/A
Article 12	**Safety of stationary battery energy storage systems**	Not applicable to portable batteries.	N/A
1.	Stationary battery energy storage systems placed on the market or put into service shall be safe during their normal operation and use.		N/A
2.	By 18 August 2024, the technical documentation referred to in Annex VIII shall:		N/A
	(a) demonstrate that the stationary battery energy storage systems are compliant with paragraph 1 and include evidence that they have been successfully tested for the safety parameters set out in Annex V, for which state-of-the-art testing methodologies shall be used. The safety parameters shall only apply in so far as a corresponding hazard exists for the stationary battery energy storage system in question when it is used under the conditions envisaged by the manufacturer;		N/A
	(b) include an assessment of possible safety hazards of the stationary battery energy storage system that are not addressed in Annex V;		N/A
	(c) include evidence that the hazards referred to in point (b) have been successfully mitigated and tested; state-of-the-art testing methodologies shall be used for such testing;		N/A
	(d) include mitigation instructions in case the identified hazards could occur, for example a fire or explosion.		N/A
	The technical documentation shall be reviewed if a battery is prepared for re-use, prepared for repurposing, remanufactured or repurposed.		N/A
3.	The Commission is empowered to adopt delegated acts in accordance with Article 89 to amend the safety parameters set out in Annex V in view of technical and scientific progress.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
CHAPTER III	**Labelling, marking and information requirements**		P
Article 13	**Labelling and marking of batteries**		P
1.	From 18 August 2026 or 18 months after the date of entry into force of the implementing act referred to in paragraph 10, whichever is the latest, batteries shall bear a label containing the general information on batteries set out in Part A of Annex VI.	Not requested by client for this report, not mandatory until the specified date.	N/A
2.	From 18 August 2026 or 18 months after the date of entry into force of the implementing act referred to in paragraph 10, whichever is the latest, rechargeable portable batteries, LMT batteries and SLI batteries shall bear a label containing information on their capacity.		P
3.	From 18 August 2026 or 18 months after the date of entry into force of the implementing act referred to in paragraph 10, whichever is the latest, non-rechargeable portable batteries shall bear a label containing information on their minimum average duration when used in specific applications and a label indicating 'non-rechargeable '.		N/A
4.	From 18 August 2025, all batteries shall be marked with the symbol for separate collection of batteries ('separate collection symbol') as shown in Part B of Annex VI.	Separate collection symbol marked, on battery and packaging.	P
	The separate collection symbol shall cover at least 3 % of the area of the largest side of the battery up to a maximum size of 5 × 5 cm.		P
	In the case of cylindrical battery cells, the separate collection symbol shall cover at least 1,5 % of the surface area of the battery and shall have a maximum size of 5 × 5 cm.		N/A
	Where the size of the battery is such that the separate collection symbol would be smaller than 0,47 × 0,47 cm, the battery does not need to be marked with that symbol. Instead, a separate collection symbol measuring at least 1 × 1 cm shall be printed on the packaging.		P
5.	All batteries containing more than 0,002 % cadmium or more than 0,004 % lead, shall be marked with the chemical symbol for the metal concerned: Cd or Pb.	Not exceed the limit.	N/A
	The relevant chemical symbol indicating the heavy metal content shall be printed beneath the separate collection symbol and shall cover an area of at least one-quarter the size of that symbol.		N/A
6.	From 18 February 2027, all batteries shall be marked with a QR code as described in Part C of Annex VI. The QR code shall provide access to the following:	Not requested by client for this report, not mandatory until the specified date.	N/A
	(a) for LMT batteries, industrial batteries with a capacity greater than 2kWh and electric vehicles batteries, the battery passport in accordance with Article 77;		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	(b) for other batteries, the applicable information referred to in paragraphs 1 to 5 of this Article, the declaration of conformity referred to in Article 18, the report referred to in Article 52(3) and the information regarding the prevention and management of waste batteries laid down in Article 74(1), points (a) to (f);		N/A
	(c) for SLI batteries, the amount of cobalt, lead, lithium or nickel recovered from waste and present in active materials in the battery, calculated in accordance with Article 8.		N/A
	This information shall be complete, up-to-date and accurate.		N/A
7.	The labels and the QR code referred to in paragraphs 1 to 6 shall be printed or engraved visibly, legibly and indelibly on the battery. Where this is not possible or not warranted on account of the nature and size of the battery, the labels and the QR code shall be affixed to the packaging and to the documents accompanying the battery.		N/A
8.	The Commission is empowered to adopt delegated acts in accordance with Article 89 to amend this Regulation to provide for alternative types of smart labels for use instead of or in addition to the QR code, in view of technical and scientific progress.		N/A
9.	Batteries that have been subject to preparation for re-use, preparation for repurposing, repurposing or remanufacturing shall bear new labels or shall be marked with markings in accordance with this Article, and containing information on their change of status in accordance with point 4 of Annex XIII, which shall be accessible through the QR code.		N/A
10.	The Commission shall, by 18 August 2025, adopt implementing acts to establish harmonised specifications for the labelling requirements referred to in paragraphs 1, 2 and 3 of this Article. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 90(3).		N/A
Article 14	**Information on the state of health and expected lifetime of batteries**	Not applicable to portable batteries.	N/A
1.	From 18 August 2024, up-to-date data for the parameters for determining the state of health and expected lifetime of batteries as set out in Annex VII shall be contained in the battery management system of stationary battery energy storage systems, LMT batteries and electric vehicle batteries.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
2.	Read-only access to the data for the parameters set out in Annex VII through the battery management system referred to in paragraph 1 shall be provided, respecting the intellectual property rights of the battery manufacturer, on a non-discriminatory basis to the natural or legal person who has legally purchased the battery, including independent operators or waste management operators, or any third party acting on their behalf at any time, for the purpose of: (a) making the battery available to independent aggregators or market participants through energy storage; (b) evaluating the residual value or remaining lifetime of the battery and capability for further use, based on the estimation of the state of health of the battery; (c) facilitating the preparation for re-use, preparation for repurposing, repurposing or remanufacturing of the battery.		N/A
3.	The battery management system shall include a software reset function, in case economic operators carrying out preparation for re-use, preparation for repurposing, repurposing or remanufacturing need to upload different battery management system software. If the software reset function is used, the original battery manufacturer shall not be held liable for any breach of the safety or functionality of the battery that could be attributed to battery management system software uploaded after that battery was placed on the market.		N/A
4.	The Commission is empowered to adopt a delegated act in accordance with Article 89 to amend the parameters for determining the state of health and expected lifetime of batteries set out in Annex VII in view of market developments and technical and scientific progress and to ensure synergies with parameters set in UN Global Technical Regulation No 22 on in-vehicle battery durability for electrified vehicles, with due regard to the intellectual property rights of the battery manufacturer.		N/A
5.	The provisions of this Article shall apply in addition to those laid down in Union law on type approval of vehicles.		N/A
CHAPTER IV	**Conformity of batteries**		P
1.	The EU declaration of conformity shall state that the compliance with the requirements laid down in Articles 6 to 10 and Articles 12, 13 and 14 has been demonstrated.	Applicable article stated.	P

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Clause	Requirement + Test	Result - Remark	Verdict
2.	The EU declaration of conformity shall have the model structure set out in Annex IX, shall contain the elements specified in the relevant modules set out in Annex VIII, and shall be kept up to date. It shall be translated into the language or languages required by the Member State in which the battery is placed or made available on the market or put into service. It shall be drawn up in electronic format and, where requested, it shall be provided in paper format.	EU DECLARATION OF CONFORMITY content provided.	P
3.	Where a battery is subject to more than one Union act requiring an EU declaration of conformity, a single EU declaration of conformity shall be drawn up in respect of all such Union acts. That declaration shall state the Union acts concerned and their publication references.		N/A
4.	By drawing up the EU declaration of conformity, the manufacturer shall assume responsibility for the compliance of the battery with the requirements laid down in this Regulation.		P
5.	Without prejudice to paragraph 3, a single EU declaration of conformity may be made up of one or more individual EU declarations of conformity already drawn up in compliance with a different Union act or acts, in order to reduce the administrative burden on economic operators.		N/A
Article 19	**General principles of the CE marking**		P
	The CE marking shall be subject to the general principles set out in Article 30 of Regulation (EC) No 765/2008.		P
Article 20	**Rules and conditions for affixing the CE marking**		P
1.	The CE marking shall be affixed visibly, legibly and indelibly to the battery. Where that is not possible or not warranted due to the nature of the battery, it shall be affixed to the packaging and to the documents accompanying the battery.		P
2.	The CE marking shall be affixed before the battery is placed on the market or put into service.		P
3.	The CE marking shall be followed by the identification number of the notified body where required under Annex VIII. That identification number shall be affixed by the notified body itself or, under its instructions, by the manufacturer or by its authorised representative.	Not applicable to portable batteries	N/A
4.	The CE marking and the identification number referred to in paragraph 3 may be followed, if applicable, by any pictogram or other mark indicating a special risk, use or any danger linked to the use, storage, treatment or transport of the battery.		N/A
5.	Member States shall build upon existing mechanisms to ensure correct application of the regime governing the CE marking and shall take appropriate action in the event of improper use of that marking.		N/A
CHAPTER V	**Notification of conformity assessment bodies**		N/A
CHAPTER VI	**Obligations of economic operators other than the obligations in Chapters VII and VIII**		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

CHAPTER VII	**Obligations of economic operators as regards battery due diligence policies**	Not mandatory until the specified date.	N/A
Article 47	**Scope of this Chapter**		N/A
Article 48	**Battery due diligence policies**		N/A
1.	From 18 August 2025, economic operators that place batteries on the market or put them into service shall fulfil the due diligence obligations laid down in paragraphs 2 and 3 of this Article, and in Articles 49, 50 and 52 and shall, to that end, set up and implement battery due diligence policies.		N/A
2.	Economic operators referred to in paragraph 1 of this Article shall have their battery due diligence policies verified by a notified body in accordance with Article 51 (‘third-party verification’) and periodically audited by that notified body to make sure that the battery due diligence policies are maintained and applied in accordance with Articles 49, 50 and 52. The notified body shall provide the audited economic operator with an audit report.		N/A
3.	Economic operators referred to in paragraph 1 of this Article shall keep documentation demonstrating their fulfilment of the obligations laid down in Articles 49, 50 and 52, including the verification report and approval decision referred to in Article 51 and the audit reports referred to in paragraph 2 of this Article, for 10 years after the last battery manufactured under the relevant battery due diligence policy has been placed on the market.		N/A
4.	Without prejudice to the individual responsibility of economic operators for their battery due diligence policies, economic operators referred to in paragraph 1 of this Article may, for the purposes of compliance with the requirements laid down in Articles 48, 49, 50 and 52, collaborate with other actors, including through due diligence schemes recognised under this Regulation.		N/A
5.	By 18 February 2025, the Commission shall publish guidelines as regards the application of the due diligence requirements laid down in Articles 49 and 50, with regard to the risks referred to in point 2 of Annex X, and in line, in particular, with the international instruments referred to in points 3 and 4 of Annex X.		N/A
6.	Member States may, in order to provide information and support to economic operators in fulfilling the due diligence obligations under this Regulation, set up and operate, individually or jointly, dedicated websites, platforms or portals.		N/A
7.	The Commission may complement the Member State support measures referred to in paragraph 6, by building on existing Union action to support due diligence in the Union and in third countries, and may devise new measures to help economic operators fulfil their obligations under this Regulation.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
8.	The Commission shall regularly assess the need to update the list of raw materials and risk categories set out in Annex X. The Commission is empowered to adopt delegated acts in accordance with Article 89 to: (a) amend the list of raw materials in point 1 of Annex X and of risk categories in point 2 of Annex X, in view of scientific and technological progress in battery manufacturing and chemistries and amendments to Regulation (EU) 2017/821; (b) amend the list of international instruments in point 3 of Annex X, in accordance with developments within the relevant international fora concerning standards related to due diligence policies and to protection of the environment and of social rights; (c) amend the obligations on the economic operators referred to in paragraph 1 of this Article which are laid down in Articles 49 and 50 in view of amendments to Regulation (EU) 2017/821, and amend the list of internationally recognised due diligence instruments set out in point 4 of Annex X.		N/A
Article 49	**Economic operator's management system**		N/A
1.	Each economic operator referred to in Article 48(1) shall:		N/A
	(a) adopt, and clearly communicate to suppliers and the public, a company battery due diligence policy, concerning raw materials listed in point 1 of Annex X, and associated social and environmental risk categories listed in point 2 of Annex X;		N/A
	(b) incorporate in its battery due diligence policy standards that are consistent with the standards set out in the internationally recognised due diligence instruments listed in point 4 of Annex X;		N/A
	(c) structure its internal management system to support its battery due diligence policy by assigning responsibility to its top management level to oversee its battery due diligence policy as well as maintain records of that system for a minimum of 10 years;		N/A
	(d) establish and operate a system of controls and transparency regarding the supply chain, including a chain of custody or traceability system, identifying upstream actors in the supply chain;		N/A
	(e) incorporate its battery due diligence policy, including risk management measures, into contracts and agreements with suppliers; and		N/A
	(f) establish a grievance mechanism, including an early-warning risk-awareness system and a remediation mechanism, or provide for such mechanisms through collaborative agreements with other economic operators or organisations or by facilitating recourse to an external expert or body, such as an ombudsman; such mechanisms shall be based on the UN Guiding Principles on Business and Human Rights.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
2.	The system referred to in paragraph 1, point (d), shall be supported by documentation that provides at least the following information:		N/A
	(a) a description of the raw material, including its trade name and type;		N/A
	(b) the name and address of the supplier that supplied the raw material present in the batteries to the economic operator that places the batteries containing the raw material in question on the market;		N/A
	(c) the country of origin of the raw material and the market transactions from the raw material's extraction to the immediate supplier to the economic operator that places the battery on the market;		N/A
	(d) the quantities of the raw material present in the battery placed on the market, expressed in percentage or weight;		N/A
	(e) third-party verification reports issued by a notified body and concerning the suppliers as referred to in Article 50(3);		N/A
	(f) if the reports referred to in point (e) are not available and where the raw material originates from a conflict-affected and high-risk area, additional information in accordance with the specific recommendations for upstream economic operators, as set out in the OECD Due diligence guidance for Responsible Supply Chains of Minerals from Conflict- Affected and High-Risk Areas, where relevant, such as the mine of origin, locations where the raw material is consolidated, traded and processed, and taxes, fees and royalties are paid.		N/A
	Third party verification reports referred to in point (e) of the first subparagraph shall be made available by suppliers as referred to in Article 50(3) to the downstream operators of the supply chain.		N/A
Article 50	**Risk management obligations**		N/A
1.	The economic operator referred to in Article 48(1) shall:		N/A
	(a) identify and assess the risk of adverse impacts in its supply chain, associated with the risk categories listed in point 2 of Annex X as part of its management plan, including on the basis of the information provided pursuant to Article 49 and any other relevant information that is either publicly available or provided by stakeholders, by reference to its battery due diligence policy;		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	(b) design and implement a strategy to respond to the identified risks to prevent, mitigate and otherwise address adverse impacts by: (i) reporting findings of its risk assessment to its top management level assigned in accordance with Article 49(1), point (c); (ii) adopting risk management measures that are consistent with the internationally recognised due diligence instruments listed in point 4 of Annex X, considering its ability to influence, and where necessary take steps to exert pressure on, suppliers, including their subsidiaries and subcontractors, who can most effectively prevent or mitigate the identified risk; (iii) designing and implementing a risk management plan, monitoring and tracking performance of risk mitigation efforts, reporting back to its top management level assigned in accordance with Article 49(1), point (c), and considering suspending or discontinuing engagement with a supplier or its subsidiary or subcontractor after failed attempts at mitigation, based on relevant contracts and agreements referred to in Article 49(1), point (e); (iv) undertaking additional fact and risk assessments for risks requiring mitigation, or after a change of circumstances.		N/A
2.	If the economic operator referred to in Article 48(1) pursues risk mitigation efforts while continuing trade or temporarily suspending trade, it shall consult with suppliers and with the stakeholders concerned, including local and national government authorities, international or civil society organisations and affected third parties such as local communities, before establishing a strategy for measurable risk mitigation in the risk management plan referred to in paragraph 1, point (b)(iii), of this Article.		N/A
3.	The economic operator referred to in Article 48(1) shall identify and assess the probability of adverse impacts in the risk categories listed in point 2 of Annex X, in its supply chain. That economic operator shall identify and assess the risks in its supply chain as part of its own risk management systems. The economic operator shall carry out third party verifications of its own due diligence chains via a notified body in accordance with Article 51. The economic operator may use third-party verification reports issued pursuant to Article 51(2) by such a notified body concerning battery due diligence policies implemented by suppliers in that chain in accordance with this Chapter. The economic operator may also use those third-party verification reports to assess, as appropriate, the due diligence practices of those suppliers.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
4.	The economic operator referred to in Article 48(1) shall report the findings of the risk assessment referred to in paragraph 3 of this Article to its top management level to which responsibility has been assigned in accordance with Article 49(1), point (c), and shall implement the strategy referred to in paragraph 1, point (b), of this Article.		N/A
Article 51	**Third-party verification of battery due diligence policies**		N/A
Article 52	**Disclosure of information on battery due diligence policies**		N/A
1.	The economic operator referred to in Article 48(1) shall make available upon request to Member States' market surveillance authorities or national authorities the verification report and approval decision issued in accordance with Article 51, the audit reports referred to in Article 48(2) and available evidence of compliance with a due diligence scheme recognised by the Commission in accordance with Article 53.		N/A
2.	The economic operator referred to in Article 48(1) shall make available to its immediate downstream purchasers all relevant information gained and maintained pursuant to its battery due diligence policy, with due regard for business confidentiality and other competitive concerns.		N/A
3.	The economic operator referred to in Article 48(1) shall on an annual basis review and make publicly available, including on the internet, a report on its battery due diligence policy. That report shall contain, in a manner that is easily comprehensible for end-users and clearly identifies the batteries concerned, the data and information on steps taken by that economic operator to comply with the requirements laid down in Articles 49 and 50, including findings of significant adverse impacts in the risk categories listed in point 2 of Annex X, and how they have been addressed, as well as a summary report of the third-party verifications carried out in accordance with Article 51, including the name of the notified body, with due regard for business confidentiality and other competitive concerns. That report shall also cover, where relevant, access to information, public participation in decision-making and access to justice in environmental matters in relation to the sourcing, processing and trading of the raw materials present in batteries.		N/A
4.	Where the economic operator referred to in Article 48(1) can demonstrate that the raw materials listed in point 1 of Annex X, that are present in the battery are derived from recycled sources, it shall publicly disclose its conclusions in reasonable detail, with due regard for business confidentiality and other competitive concerns.		N/A
Article 53	**Recognition of due diligence schemes**		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
CHAPTER VIII	**Management of waste batteries**		N/A
CHAPTER IX	**Digital battery passport**	Not applicable to portable batteries	N/A
Article 77	**Battery passport**		N/A
1.	From 18 February 2027 each LMT battery, each industrial battery with a capacity greater than 2 kWh and each electric vehicle battery placed on the market or put into service shall have an electronic record ('battery passport').		N/A
2.	The battery passport shall contain information relating to the battery model and information specific to the individual battery, including resulting from the use of that battery, as set out in Annex XIII.1.		N/A
	The information in the battery passport shall comprise: (a) information accessible to the general public in accordance with point 1 of Annex XIII; (b) information accessible only to notified bodies, market surveillance authorities and the Commission in accordance with points 2 and 3 of Annex XIII; and (c) information accessible only to any natural or legal person with a legitimate interest in accessing and processing that information for the purposes referred to in points (a) and (b) of the third subparagraph in accordance with points 2 and 4 of Annex XIII.		N/A
	The purposes for accessing and processing the information as referred to in point (c) of the second subparagraph, shall: (a) concern dismantling of the battery, including safety measures to be taken during the dismantling, and the detailed composition of the battery model and be essential to allow repairers, remanufacturers, second-life operators and recyclers to conduct their respective economic activities in accordance with this Regulation; (b) in the case of individual batteries, be essential to the purchaser of the battery or parties acting on the purchaser's behalf, for the purpose of making the individual battery available to independent energy aggregators or energy market participants.		N/A
	The information referred to in the second subparagraph shall be included in the battery passport to the extent applicable to the category or sub-category of battery concerned.		N/A
	The Commission is empowered to adopt delegated acts in accordance with Article 89 to amend Annex XIII as regards the information to be included in the battery passport in view of technical and scientific progress.		N/A
3.	The battery passport shall be accessible through the QR code referred to in Article 13(6) which links to a unique identifier that the economic operator placing the battery on the market shall attribute to it.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	The QR code and the unique identifier shall comply with the ISO/IEC standards 15459-1:2014, 15459-2:2015, 15459- 3:2014, 15459-4:2014, 15459-5:2014 and 15459-6:2014 or their equivalent.		N/A
	The Commission is empowered to adopt delegated acts in accordance with Article 89 to amend the second subparagraph of this paragraph in light of technical and scientific progress by replacing the standards referred to in that subparagraph or adding other European or international standards with which the QR code and the unique identifier shall comply.		N/A
4.	The economic operator placing the battery on the market shall ensure that the information in the battery passport is accurate, complete and up to date. It may give written authorisation to any other operator to act on its behalf.		N/A
5.	All information included in the battery passport shall be based on open standards and be in an interoperable format, transferable through an open interoperable data exchange network without vendor lock-in, machine-readable, structured and searchable, in accordance with the essential requirements laid down in Article 78.		N/A
6.	The access to information included in the battery passport shall be regulated in accordance with the essential requirements laid down in Article 78.		N/A
7.	For a battery that has been subject to preparation for re-use, preparation for repurposing, repurposing or remanufacturing, the responsibility for the fulfilment of the obligations under paragraph 4 of this Article shall be transferred to the economic operator that has placed that battery on the market or has put it into service. Such battery shall have a new battery passport linked to the battery passport or passports of the original battery or batteries.		N/A
	Where the status of a battery changes to that of a waste battery, the responsibility for the fulfilment of the obligations under paragraph 4 of this Article shall be transferred either to the producer or, where appointed in accordance with Article 57(1), the producer responsibility organisation, or the waste management operator selected in accordance with Article 57(8).		N/A
8.	A battery passport shall cease to exist after the battery has been recycled.		N/A
9.	By 18 August 2026, the Commission shall adopt implementing acts specifying which persons are to be considered persons with a legitimate interest as referred to in points 2 and 4 respectively of Annex XIII for the purposes of paragraph 2, point (c), of this Article and to which information listed in those points they shall have access, and to what extent they can download, share, publish and re-use that information. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 90(3).		N/A

2023/1542 EU			
Clause	Requirement + Test	Result - Remark	Verdict
	The criteria for specifying the persons referred to in paragraph 2, point (c), and for determining the extent to which they can download, share, publish and re-use the information referred to in points 2 and 4 of Annex XIII shall be the following: (a) the necessity of having such information in order to evaluate the status and residual value of the battery and its capability for further use; (b) the necessity of having such information for the purpose of preparation for re-use, preparation for repurposing, repurposing, remanufacturing or recycling of the battery, or for choosing between those operations; (c) the need to ensure that the accessing and processing of information in the battery passport that is commercially sensitive is limited to the minimum necessary in accordance with applicable Union law.		N/A
Article 78	**Technical design and operation of the battery passport**		N/A
	The technical design and operation of the battery passport shall comply with the following essential requirements:		N/A
	(a) the battery passport shall be fully interoperable with other digital product passports required by Union law concerning eco-design, in relation to the technical, semantic and organisational aspects of end-to-end communication and data transfer;		N/A
	(b) consumers, economic operators and other relevant actors shall have access to the battery passport free of charge and based on their respective access rights set out in Annex XIII and the implementing act adopted pursuant to Article 77(9);		N/A
	(c) the data included in the battery passport shall be stored by the economic operator responsible for the fulfilment of the obligations under Article 77(4) or (7), or by operators authorised to act on their behalf;		N/A
	(d) if the data included in the battery passport are stored or otherwise processed by operators authorised to act on behalf of the economic operator responsible for the fulfilment of the obligations under Article 77(4) or (7), those operators shall not be allowed to sell, re-use or process such data, in whole or in part, beyond what is necessary for the provision of the relevant storing or processing services;		N/A
	(e) the battery passport shall remain available after the economic operator responsible for the fulfilment of the obligations under Article 77(4) or (7) ceases to exist or ceases its activity in the Union;		N/A
	(f) the rights to access, introduce, modify or update information in the battery passport shall be restricted based on the access rights specified in Annex XIII and the implementing act adopted pursuant to Article 77(9);		N/A

2023/1542 EU			
Clause	Requirement + Test	Result - Remark	Verdict
	(g) data authentication, reliability and integrity shall be ensured;		N/A
	(h) the battery passport shall be such that a high level of security and privacy is ensured and fraud is avoided.		N/A
CHAPTER X	**Union market surveillance and Union safeguard procedures**		N/A
CHAPTER XI	**Green public procurement and procedure for amending restrictions on substances**		N/A
CHAPTER XII	**Delegated powers and committee procedure**		N/A
CHAPTER XIII	**Amendments**		N/A
CHAPTER XIV	**Final provisions**		N/A
ANNEX I	**RESTRICTION ON SUBSTANCES**		P
ANNEX II	**CARBON FOOTPRINT**		N/A
ANNEX III	**ELECTROCHEMICAL PERFORMANCE AND DURABILITY PARAMETERS FOR PORTABLE BATTERIES OF GENERAL USE**		N/A
ANNEX IV	**ELECTROCHEMICAL PERFORMANCE AND DURABILITY REQUIREMENTS FOR LMT BATTERIES, INDUSTRIAL BATTERIES WITH A CAPACITY GREATER THAN 2 KWH AND ELECTRIC VEHICLE BATTERIES**		N/A
ANNEX V	**SAFETY PARAMETERS**		N/A
ANNEX VI	**LABELLING, MARKING AND INFORMATION REQUIREMENTS**	See Article 13, for separate collection symbol and capacity marking only. Manufacturer declares that manufacturer and importer information to be provided in document accompanying the battery.	P
ANNEX VII	**PARAMETERS FOR DETERMINING THE STATE OF HEALTH AND EXPECTED LIFETIME OF BATTERIES**		N/A
ANNEX VIII	**CONFORMITY ASSESSMENT PROCEDURES**		N/A
ANNEX IX	**EU DECLARATION OF CONFORMITY No* …** *** (identification number of the declaration)**	EU DECLARATION OF CONFORMITY content provided.	P
ANNEX X	**LIST OF RAW MATERIALS AND RISK CATEGORIES**		N/A
ANNEX XI	**CALCULATION OF COLLECTION RATES FOR WASTE PORTABLE BATTERIES AND WASTE LMT BATTERIES**		N/A

2023/1542 EU			
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX XII	**STORAGE AND TREATMENT, INCLUDING RECYCLING, REQUIREMENTS**		N/A
ANNEX XIII	**INFORMATION TO BE INCLUDED IN THE BATTERY PASSPORT**		N/A
ANNEX XIV	**MINIMUM REQUIREMENTS FOR SHIPMENTS OF USED BATTERIES**		N/A
ANNEX XV	**CORRELATION TABLE**		N/A

2023/1542 EU			
Clause	Requirement + Test	Result - Remark	Verdict

	TABLE: Critical components information				
Object / part No.	**Manufacturer/ trademark**	**Type / model**	**Technical data**	**Standard**	**Mark(s) of conformity**
Cell	Fujian Nanping Nanfu New Energy Co., Ltd.	CR1216, CR1220, CR1225, CR1616, CR1632, CR2016, CR2025, CR2032, CR2412, CR2430, CR2450, CR2477, CR3032	CR1216:3V, 25mA, CR1220:3V, 40mA, CR1225:3V, 50mA, CR1616: 3V, 50mA, CR1632:3V, 140mA, CR2016: 3V, 90mA, CR2025: 3V, 165mA, CR2032: 3V, 240mA, CR2412: 3V, 100mA, CR2430: 3V, 300mA, CR2450: 3V, 600mA, CR2477: 3V, 1000mA, CR3032: 3V, 500mA,	--	--
-Electrolyte	Zhuhai Smoothway Electronic Materials Co., Ltd.	T2062	1,2-dimethoxyethane, Organic electrolyte,	--	--
-Separator	Shenzhen Xinheyuan Electronic Technology Co., Ltd.	Y16T	Polypaopylene, Thickness: 0.25mm, Gramage 225g/m^2 Shutdown temperature: 120°C	--	--
-Positive electrode	Kunming Tianmou Technology Co., Ltd.	GK-A	Manganese dioxide	--	--
-Negative electrode	Prince International Corporation	--	Lithium metal, Purity: ≥99.9%	--	--

2023/1542 EU			
Clause	Requirement + Test	Result - Remark	Verdict

-Cell case	Ningbo Qiyi Metal Co., Ltd.	SUS 430	Stainless steel	--	--

--End of Main Report--

TÜVRheinland®
Precisely Right.

Report No.:	168472301a 001
Client:	**LIANYING TECHNOLOGY (SHENZHEN) CO., LTD.**
Contact Information:	C1, 24th Floor, Building 12, Le hui Center, Jihua Road, BantianStreet, Longgang District, Shenzhen, Guangdong, P.R. China
Test item(s):	3 materials
Identification/ Model No(s):	Coin Manganese Dioxide Lithium Battery CR1216, CR1220, CR1225, CR1616, CR1632, CR2016, CR2025, CR2032, CR2412, CR2430, CR2450, CR2477, CR3032
Sample obtaining method:	Sending by customer
Condition at delivery:	Test item complete and undamaged.
Sample Receiving date:	2024-02-29
Testing Period:	2024-03-06 to 2024-03-20
Place of testing:	Chemical laboratory Shenzhen

Test Specification:

Please refer to "Test Result Summary List" on page 2 for details

For and on behalf of
TÜV Rheinland (Shenzhen) Co., Ltd.

2024-04-07	Grid Guo / Engineer
Date	*Name/Position*

Sample information is provided by customer. Test result is drawn according to the kind and extent of tests performed.
This test report relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.
"Decision Rule" document announced in our website (https://www.tuv.com/landingpage/en/qm-gcn/) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report.

TÜV Rheinland (Shenzhen) Co., Ltd. · 1F East & 3F West - 4F, Cybio Technology Building No.1, No. 16 Kejibei 2nd Road,
High-Tech Industry Park North Nanshan District, 518057, Shenzhen, China
Tel.: (86) 755 8268 1188 · Fax: (86) 755 2603 7102 · Mail: service-gc@tuv.com · Web: www.tuv.com

Test Report No.: 168472301a 001

Test Result Summary :

	Test Specification:	*Test result:*
	Restrictions of hazardous substances for Battery - according to Article 6(1) of Regulation (EU) 2023/1542	
1	Heavy Metal Test for Battery - according to Annex I of Regulation (EU) 2023/1542	PASS
2	Total Cadmium Content in accordance to: REACH regulation (EC) No. 1907/2006 Annex XVII Item 23 and its amendments (EC) No. 552/2009, (EU) No. 494/2011 and (EU) No. 835/2012 and (EU) No.217/2016.	PASS
3	Selected Perfluorinated carboxylic acids (C9-C14 PFCAs) and related substances accordance to: REACH regulation (EC) No. 1907/2006 and its amendment regulations on Annex XVII entry 68	PASS
4	Organotin compounds content according to REACH Regulation (EC) No. 1907/2006 Annex XVII Item 20 and amendment Commission Regulation (EU) No. 276/2010 (formerly known as 2009/425/EC)	PASS
5	Octabromodiphenylether (OctaBDE) content accordance to: REACH regulation (EC) No. 1907/2006 Annex XVII entry 45	PASS
6	REACH regulation (EC) No. 1907/2006 and its amendment regulations on Annex XVII entry 51: Phthalates	PASS
7	Dimethyl fumarate Content - According to REACH regulation (EC) No. 1907/2006 Annex XVII Entry 61 and its amendments	PASS
8	REACH regulation (EC) No. 1907/2006 and amendment no. 552/2009 Annex XVII entries 62: Phenylmercury compounds	PASS
9	Total Lead Content - REACH Regulation (EC) No. 1907/2006, amendment no. 836/2012 Annex XVII Item 63	PASS

Material List:

Item: Coin Manganese Dioxide Lithium Battery

CR1216, CR1220, CR1225, CR1616, CR1632, CR2016, CR2025, CR2032, CR2412, CR2430, CR2450, CR2477, CR3032

Material No.	Material	Color	Location
M001	Battery	Silver	Refer to photo
M002	Plastic	Translucent	Refer to photo
M003	Paper	White	Refer to photo

1.Heavy Metal Test for Battery - according to Annex I of Regulation (EU) 2023/1542

Test Method: Acid digestion, analyzed by ICP-OES/AAS

Test result

Test No.	Material No.	Test Parameter	Unit	RL	Regulatory requirement		Test Result
					Maximum Permissible Limit	Labelling Limit	
T001	M001	Cadmium	%	0.001	Portable batteries: 0.002	0.002	< RL
		Lead	%	0.001	Portable batteries: 0.01#	0.004	< RL
		Mercury	%	0.0005	0.0005	n.a.	< RL

Abbreviation: Pb = Lead
Cd = Cadmium
Hg = Mercury
n.a.= not applicable
RL = Reporting Limit
< = Less than

Remark:

According to Annex I of the Regulation (EU) 2023/1542, the Lead restriction shall apply to portable batteries and portable zinc-air button cells from 18 August 2024 and 18 August 2028 respectively.

* According to Article 13(4) and 13(5) of the Regulation (EU) 2023/1542, all batteries shall be marked with the symbol indicating ‘separate collection’; and all batteries containing more than 0.002% cadmium or more than 0.004% lead shall be marked with the chemical symbol for the metal concerned.

2.Total Cadmium Content

Test Method: Acid digestion, analyzed by AAS/ ICP-OES

Test Result:

Test No.	Material No.	Test Parameter	Unit	RL	Regulatory Requirement	Test Result
T001	M002 + M003	Cadmium	mg/kg	10	100	< RL

Abbreviation: < = less than
RL = Reporting Limit
mg/kg = milligram per kilogram

Remark:

* Regulations on Cadmium

		Maximum Permissible Limit				
EU	**Legislation**	**Plastic materials**	**Paint (wet state)**	**Paint on the painted articles**	**Paint (high zinc content)**	**Metal parts of jewellery and imitation jewellery articles and hair assessories**
EC	REACH regulation (EC) No. 1907/2006 Annex XVII Item 23 and its amendments (EC) No. 552/2009, (EU) No. 494/2011, (EU) No. 835/2012 and (EU) No. 217/2016.	100mg/kg	100mg/kg	1000mg/kg	1000mg/kg	100mg/kg

		Maximum Permissible Limit
Country	**Legislation**	**Paint, plastic, plating/ coating of surface treatment**
Switzerland	Switzerland Chemikalien-Risikoreduktions-Verordnung-ChemRRV, 814.81, 18 May 2005	100mg/kg

3.Selected Perfluorinated carboxylic acids (C9-C14 PFCAs) and related substances

Test Method: In house method, determination by CI-GCMS, GC-MSMS and LC-MSMS

				Test No.	T001
				Material No.	M002 + M003
Test Parameter	CAS NO	Unit	RL	Regulatory Requirement	Result
Perfluorononan-1-oic acid (PFNA)	375-95-1	mg/kg	0.01	-	< RL
Perfluorodecanoic acid (PFDA)	335-76-2	mg/kg	0.01	-	< RL
Perfluoroundecanoic acid (PFUnA)	2058-94-8	mg/kg	0.01	-	< RL
Perfluorododecanoic acid (PFDoA)	307-55-1	mg/kg	0.01	-	< RL
Perfluorotridecanoic acid (PFTrA)	72629-94-8	mg/kg	0.01	-	< RL
Perfluorotetradecanoic acid (PFTeA)	376-06-7	mg/kg	0.01	-	< RL
Perfluoro-3,7-dimethyloctanoic acid (PF-3,7-DMOA)	172155-07-6	mg/kg	0.01	-	< RL
Sum of C9-C14 PFCAs	--	mg/kg	--	0.025	<RL
1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	678-39-7	mg/kg	0.25	-	< RL
1H,1H,2H,2H-Perfluoro-1-dodecanol (10:2 FTOH)	865-86-1	mg/kg	0.25	-	< RL
Perfluorodecanesulfonate (PFDS)	335-77-3	mg/kg	0.01	-	< RL
2H,2H,3H,3H-Perfluoroundecanoicacid (H4PFUnA)	34598-33-9	mg/kg	0.01	-	< RL
1H,1H,2H,2H-Perfluorododecanesulfonicacid (10:2 FTS)	120226-60-0	mg/kg	0.1	-	< RL
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2-FTSA)	39108-34-4	mg/kg	0.1	-	< RL
1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5	mg/kg	0.1	-	< RL
1H,1H,2H,2H-Perfluorododecylacrylate (10:2 FTA)	17741-60-5	mg/kg	0.1	-	< RL
1H, 1H, 2H, 2H-Perfluorodecyldichloromethylsilane (C8 -PFSi)	3102-79-2	mg/kg	0.1	-	< RL
8:2 Fluorotelomer olefin (8:2 FTO)	21652-58-4	mg/kg	0.1	-	< RL
1H,1H,2H,2H-Perfluorodecyl acrylate (8:2-FTA)	27905-45-9	mg/kg	0.1	-	< RL
Perfluorooctylethyl Methacrylate (8:2-FTMAC)	1996-88-9	mg/kg	0.1	-	< RL
1H,1H,2H,2H-Heptadecafluoro-1-iododecane (8:2-FTI)	2043-53-0	mg/kg	0.1	-	< RL
2-(Perfluorodecyl)ethyl methacrylate (10:2 FTMA)	2144-54-9	mg/kg	0.1	-	< RL
1H,1H,2H,2H-Perfluorododecyl iodide (10:2 FTI)	2043-54-1	mg/kg	0.1	-	< RL
1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)	30046-31-2	mg/kg	0.1	-	< RL
Sum of C9-C14 PFCA related substances	--	mg/kg	--	0.26	<RL
Conclusion	--	--	--	--	Pass

Abbreviation: < = Less than
RL = Reporting Limit
mg/kg = milligram per kilogram

Remark:

* Requirements according to Annex XVII of Regulation (EC) No 1907/2006 entry 68 (REACH) for perfluorinated carboxylic acids (C9-C14-PFCA) their salts and C9-C14-PFCA related substances amended by Regulation (EU) 2021/1297.
Shall not be used or placed on the market after 25 February 2023:
(a) another substance, as a constituent;
(b) in a mixture;
(c) in an article,
except if the concentration in the substance, the mixture, or the article is below 25 ppb for the sum of C9-C14 PFCAs and their salts or 260 ppb for the sum of C9-C14 PFCA-related substances.

4.Organotin compounds content

Test Method: Organic solvent extraction, GCMS
Ref. to ISO/TS 16179:2012

			Test No.	T001
			Material No.	M002
Test Parameter	Unit	RL	Regulatory Requirement	Result
TBT(Tributyltin) by weight of tin	%	0.01	--	< RL
TPT(Triphenyltin) by weight of tin	%	0.01	--	< RL
TOT(Trioctyltin) by weight of tin	%	0.01	--	< RL
TCyT(Tricyclohexyltin) by weight of tin	%	0.01	--	< RL
TPrT(Tripropyltin) by weight of tin	%	0.01	--	< RL
Sum of Tin of tri-substituted organotins	%	NA	0.1	< RL
DBT(Dibutyltin) by weight of tin	%	0.01	0.1	< RL
DOT(Dioctyltin) by weight of tin	%	0.01	0.1	< RL

Abbreviation: < = less than
RL = Reporting Limit
% = percentage
NA = Not Applicable

Remark:

* Single components with an amount of <0.01% were not considered in the calculation of the sum. In the case of all five tri-substituted orgaotins were not detected, the result is stated < RL

** The assessment for tri-substituted organotins is based on the sum of TBT, TPT, TOT, TCyT and TPrT by weight of tin only.

*** According to REACH Regulation (EC) No. 1907/2006 Annex XVII Entry 20 and amendment Commission Regulation (EU) No. 276/2010 (formerly known as 2009/425/EC), organostannic compounds shall not be used or be placed on the market.

Type of organostannic compounds	Maximum Permissible Limit	Implementation date
Tri-substituted organostannic compounds, e.g. tributyltin (TBT) compounds and triphenyltin (TPT) compounds	0.1 % by weight of tin	1 July 2010
Dibutyltin (DBT) compounds in mixtures and articles for supply to the general public	0.1 % by weight of tin	1 January 2012 The below products will not be applicable until 1 January 2015: - one-component and two-component room temperature vulcanisation sealants (RTV-1 and RTV-2 sealants) and adhesives, - paints and coatings containing DBT compounds as catalysts when applied on articles, - soft polyvinyl chloride (PVC) profiles whether by themselves or coextruded with hard PVC, - fabrics coated with PVC containing DBT compounds as stabilisers when intended for outdoor applications, - outdoor rainwater pipes, gutters and fittings, as well as covering material for roofing and facades
Dioctyltin (DOT) compounds - textile articles intended to come into contact with the skin, - gloves, - footwear or part of footwear intended to come into contact with the skin, - wall and floor coverings - childcare articles, - female hygiene products, - nappies, - two-component room temperature vulcanisation moulding kits (RTV-2 moulding kits)	0.1 % by weight of tin	1 January 2012

5. Octabromodiphenylether (OctaBDE) content

Test Method: Organic solvent extraction, analyzed by GCMS & LCMS

				Test No.	T001
				Material No.:	M002 + M003
Test Parameter	CAS No.	Unit	RL	Regulatory Requirement	Result
Octabromodiphenylether (OctaBDE)	32536-52-0	mg/kg	50	1000	< RL

Abbreviation: < = less than
RL = Reporting Limit
mg/kg = milligram per kilogram

Remark:

* According to REACH regulation (EC) No. 1907/2006 entry 45 of octabromo derivative (Octabromodiphenyl ether), shall not be used as substance, or as a constituent of other substances/in mixtures, or as constituents of the flame-retarded parts or articles, in concentrations greater than 0.1 % by weight.

6.Phthalates content

Test Method: Ref. to IEC 62321-8:2017

			Test No.	T001
			Material No.:	M002
Parameter	CAS No.	Unit	RL	Result
Diethylhexyl phthalate (DEHP)	117-81-7	%	0.01	<RL
Dibutyl phthalate (DBP)	84-74-2	%	0.01	<RL
Benzylbutyl phthalate (BBP)	85-68-7	%	0.01	<RL
Diisobutyl phthalate (DIBP)	84-69-5	%	0.01	<RL
Sum (DEHP+DBP+BBP+DIBP)	--	%	0.01	<RL
Conclusion: REACH regulation (EC) No. 1907/2006 and its amendment Annex XVII entries 51				Pass

Abbreviation: < = less than
RL = Reporting Limit
% = percentage

Remark:

- Requirement of REACH regulation (EC) No. 1907/2006 and its amendment Annex XVII entries 51:

Parameter	Unit	Maximum Permissible Limit
Plasticised materials in toys and childcare articles, or other articles# place on the market;		
Diethylhexyl phthalate (DEHP) Dibutyl phthalate (DBP) Benzylbutyl phthalate (BBP) Diisobutyl phthalate (DIBP)	%	0.1 (individually or sum of the four phthalates) Effective after 7 July 2020.

Denote:
Examples of articles that are excluded from the restriction
1) Articles exclusively for industrial / agricultural use / use in open air, provided that no plasticised materia comes into contact with human mucous membranes or into prolonged contact with human skin (i.e. Continuous contact of more than 10 minutes duration or intermittent contact over a period of 30 minute per day.)
2) Aircraft and motor vehicles (Directive 2007/46/EC) placed on the market before 7 January 2024, or articles for use exclusively in the maintenance or repair of them
3) Measuring devices for laboratory use;
4) Food contact material and articles within the scope of Regulation (EC) No 1935/2004 or Commission Regulation (EU) No 10/2011
5) Medical devices (Directive 90/385/EEC, 93/42/EEC or 98/79/EC)

6) Electrical and electronic equipment within the scope of Directive 2011/65/EU
7) Immediate packaging of medicinal products (Regulation (EC) No 726/2004, Directive 2001/82/EC or Directive 2001/83/EC)

7.Dimethyl fumarate (CAS No.624-49-7)

Test Method: Organic solvent extraction, GCMS analysis

Test Result:

Test No.	Material No.	Test Parameter	Unit	RL	Regulatory Requirement	Test Result
T002	M003	Dimethyl fumarate	mg/kg	0.025	0.1	< RL

Abbreviation: < = less than
RL = Reporting Limit
mg/kg = milligram per kilogram

Remark:

* According to REACH Regulation (EC) No. 1907/2006 Annex XVII Item 61 and amendment Commission Regulation (EU) No. 412/2012 (formerly known as 2012/48/EU), dimethylfumarate (DMF) shall not be used in articles or any parts thereof in concentrations greater than 0.1 mg/kg. Articles or any parts thereof containing DMF in concentrations greater than 0.1 mg/kg shall not be placed on the market.

8.Phenylmercury Compounds

Test Method: Acid digestion, analyzed by ICP-MS

				Test No.	T001
				Material No.	M002 + M003
Test Parameter	CAS No.	Unit	RL	Formulation Limit	Result
Phenylmercury acetate (by weight of Mercury)	62-38-4	%	0.005	0.01	< RL
Phenylmercury propionate (by weight of Mercury)	103-27-5	%	0.005	0.01	< RL
Phenylmercury 2-ethylhexanoate (by weight of Mercury)	13302-00-6	%	0.005	0.01	< RL
Phenylmercury octanoate (by weight of Mercury)	13864-38-5	%	0.005	0.01	< RL
Phenylmercury neodecanoate (by weight of Mercury)	26545-49-3	%	0.005	0.01	< RL

Abbreviation: RL = Reporting Limit
< = Less Than
% = Percentage

Remark:

* Shall not be manufactured, placed on the market or used as substances or in mixtures if the concentration of mercury in the mixtures is equal to or greater than 0,01 % by weight.
* Articles or any parts thereof containing one or more of these substances shall not be placed on the market if the concentration of mercury in the articles or any part thereof is equal to or greater than 0,01 % by weight.

9.Total Lead content

Test Method: CPSC-CH-E1001-08.3, CPSC-CH-E1002-08.3 and CPSC-CH-E1003-09.1 (Microwave method)

Test result:

Test No.	Material No.	Test Parameter	Unit	RL	Regulatory Requirement	Test Result
T001	M002	Lead Content	%	0.001	0.05	< RL

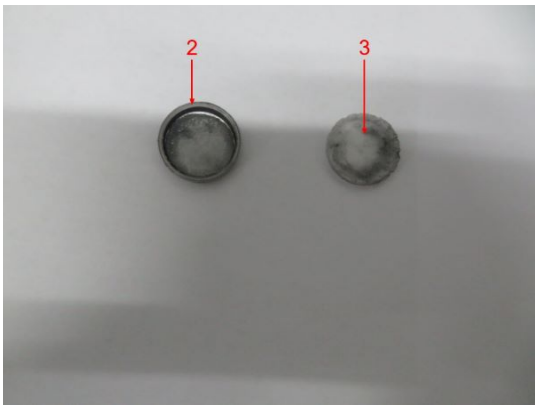
Abbreviation: < = less than
RL = Reporting Limit
% = Percentage

Remark:

*

Country	Legislation	Maximum Permissible Limit
EU	Paragraph 1-6 of Entry 63 of Annex XVII, REACH Regulation (EC) No. 1907/2006	For Jewellery, imitation jewellery, hair accessories, bracelets, necklaces , rings, piercing jewellery, wrist watches, wrist-wear, brooches and cufflinks and parts used for jewellery-making 0.05% (by weight of the individual part)
	Paragraph 7-10 of Entry 63 of Annex XVII, REACH Regulation (EC) No. 1907/2006	Articles supplied to the general public during normal or reasonably foreseeable conditions of use, be placed in the mouth by children 0.05% (by weight of the individual part) The limit shall not apply where it can be demonstrated that the rate of lead release from such an article or any such accessible part of an article, whether coated or uncoated, does not exceed 0,05 µg/cm² per hour (equivalent to 0,05 µg/g/h), and, for coated articles, that the coating is sufficient to ensure that this release rate is not exceeded for a period of at least two years of normal or reasonably foreseeable conditions of use of the article.

Sample Photos



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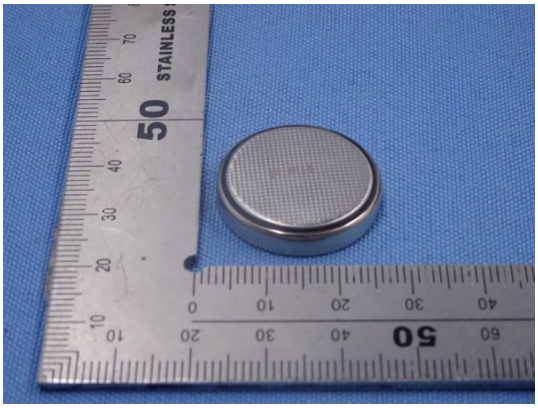
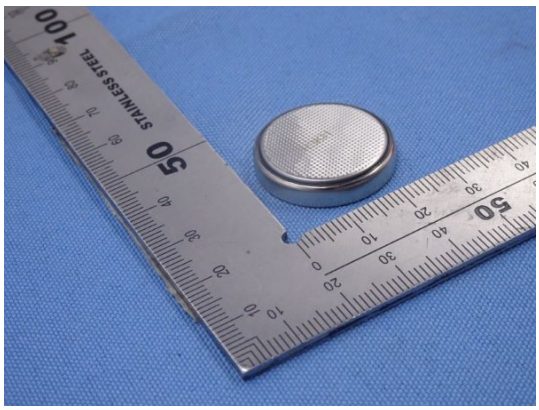


Product



Product

- END -

General Terms and Conditions of Business of TÜV Rheinland in Greater China

1. Scope

1.1 These General Terms and Conditions of Business of TÜV Rheinland in Greater China ("GTCB") is made between the client and one or more member entities of TÜV Rheinland in Greater China as applicable as the case may be ("TÜV Rheinland"). The Greater China hereof refers to Mainland China, Hong Kong and Taiwan.The client hereof includes :

(i) a natural person capable to form legally binding contracts under the applicable laws who concludes the contract not for the purpose of a daily use;

(ii) the incorporated or unincorporated entity duly organized, validly existing and capable to form legally binding contracts under the applicable law.

1.2 The following terms and conditions apply to agreed services including consultancy services, information, deliveries and similar services as well as ancillary services and other secondary obligations provided within the scope of contract performance.

1.3 Any standard terms and conditions of the client of any nature shall not apply and shall hereby be expressly excluded. No standard contractual terms and conditions of the client shall form part of the contract even if TÜV Rheinland does not explicitly object to them.

1.4 In the context of an ongoing business relationship with the client, this GTCB shall also apply to future contracts with the client without TÜV Rheinland having to refer to them separately in each individual case.

2. Quotations

Unless otherwise agreed, all quotations submitted by TÜV Rheinland can be changed by TÜV Rheinland without notice prior to its acceptance and confirmation by the other party.

3. Coming into effect and duration of contracts

3.1 The contract shall come into effect for the agreed terms upon the quotation letter of TÜV Rheinland or a separate contractual document being signed by both contracting parties, or upon the works requested by the client being carried out by TÜV Rheinland. If the client instructs TÜV Rheinland without receiving a quotation from TÜV Rheinland (quotation), TÜV Rheinland is, in its sole discretion, entitled to accept the order by giving written notice of such acceptance (including notice sent via electronic means) or by performing the requested services.

3.2 The contract term starts upon the coming into effect of the contract in accordance with article 3.1 and shall continue for the term agreed in the contract.

3.3 If the contract provides for an extension of the contract term, the contract term will be extended by the term provided for in the contract unless terminated in writing by either party with a three-month notice prior to the end of the contractual term.

4. Scope of services

4.1 The scope and type of the services to be provided by TÜV Rheinland shall be specified in the contractually agreed service scope of TÜV Rheinland by both parties. If no such separate service scope of TÜV Rheinland exists, then the written confirmation of order by TÜV Rheinland shall be decisive for the service to be provided. Unless otherwise agreed, services beyond the scope of the service description (e.g. checking the correctness and functionality of parts, products, processes, installations, organizations not listed in the service description, as well as the intended use and application of such) are not owed. In particular, no responsibility is assumed for the design, selection of materials, construction or intended use of an examined part, product, process or plant, unless this is expressly stated in the order.

4.2 The agreed services shall be performed in compliance with the regulations in force at the time the contract is entered into.

4.3 TÜV Rheinland is entitled to determine, in its sole discretion, the method and nature of the assessment unless otherwise agreed in writing or if mandatory provisions require a specific procedure to be followed.

4.4 On execution of the work there shall be no simultaneous assumption of any guarantee of the correctness (proper quality) and working order of either tested or examined parts nor of the installation as a whole and its upstream and/or downstream processes, organisations, use and application in accordance with regulations, nor of the systems on which the installation is based. In particular, TÜV Rheinland shall assume no responsibility for the construction, selection of materials and assembly of installations examined, nor for their use and application in accordance with regulations, unless these questions are expressly covered by the contract.

4.5 In the case of inspection work, TÜV Rheinland shall not be responsible for the accuracy or checking of the safety programmes or safety regulations on which the inspections are based, unless otherwise expressly agreed in writing.

4.6 If mandatory legal regulations and standards or official requirements for the agreed service scope change after conclusion of the contract, with a written notice to the client, TÜV Rheinland shall be entitled to additional remuneration for resulting additional expenses.

4.7 The services to be provided by TÜV Rheinland under the contract are agreed exclusively with the client. A contract of third parties with the services of TÜV Rheinland, as well as making available of and justifying confidence in the work results (test reports, test results, expert reports, etc.) is not part of the agreed services. This also applies if the client passes on work results - in full or in extracts - to third parties in accordance with clause 11.4.

4.8 The client understands and agrees that in order to perform the contract with TÜV Rheinland, the client may need to sign one or more contracts/ agreements with a/more third party(ies) and establish legal relationships with that/those third party(ies) according to such contracts/agreements. TÜV Rheinland will merely bears the corresponding legal liability according to this contract and the direct services actually to be provided by our company in the service process. If the relevant services are not directly provided by TÜV Rheinland (including but not limited to any testing and certification services to be provided by third testing and certification bodies), TÜV Rheinland will provide the client as agent for such relevant services. In order to achieve the purpose of the contract, the client hereby agrees that TÜV Rheinland can also sub-entrust to a third party to provide agency services, but TÜV Rheinland shall not bear any responsibility and/or risk for any services to be provided by any third parties (including but not limited to the testing and/or certification services to be entrusted and/or applied for by our company on behalf of the client to other third testing and certification bodies, agency services provided by any other third agent(s), etc.). Besides, the client shall be liable in accordance with the relevant laws and regulations and/or the terms under the contract. If the client is required to conduct any annual review/surveillance of the relevant testing and/or certification service results and pay additional fees in accordance with the relevant laws and regulations or the testing and certification rules, such fees are not within the scope of the contract price, the client shall timely perform the obligation of such annual review/surveillance and pay the corresponding fees. If the client fails to perform such obligations of the annual review/surveillance or fees payment, it may lead to adverse consequences such as failure/ suspending/cancellation/invalidity of testing and/or certification results, which shall not be borne/liable by TÜV Rheinland.

4.9 For the service content agreed in the contract, if the client requires TÜV Rheinland to deliver relevant test samples, data, etc. to any overseas laboratory or other places or sites to be designated by the client, TÜV Rheinland shall not take any responsibilities or risks for any problems during such delivery and the transportation process (including but not limited to any loss or damages of the samples and/or the materials, etc.). Besides, the relevant freight fees shall be borne by the client.

5. Performance periods/dates

5.1 The contractually agreed periods/dates of performance are based on estimates of the work involved which are prepared in line with the details provided by the client. They shall only be binding if being confirmed as binding by TÜV Rheinland in writing.

5.2 If binding periods of performance have been agreed, these periods shall not commence until the client has submitted all required documents to TÜV Rheinland.

5.3 Articles 5.1 and 5.2 also apply, even without express approval by the client, to all extensions of agreed periods/dates of performance not caused by TÜV Rheinland.

5.4 TÜV Rheinland is not responsible for a delay in performance, in particular if the client has not fulfilled his duties to cooperate in accordance with clause 6.1 or has not done so in time and, in particular, has not provided TÜV Rheinland with all documents and information required for the performance of the service as agreed in the contract.

5.5 If the performance of TÜV Rheinland is delayed due to unforeseeable circumstances such as force majeure, strikes, business disruptions, governmental regulations, transport obstacles, etc., TÜV Rheinland is entitled to postpone performance for a reasonable period of time which corresponds at least to the duration of the hindrance plus any time period which may be required to resume performance.

5.6 If the client is obliged to comply with legal, officially prescribed and/or by the accreditor prescribed deadlines, it is the client's responsibility to agree on performance dates with TÜV Rheinland, which enable the client to comply with the legal and/or officially prescribed deadlines. TÜV Rheinland assumes no responsibility in this respect unless TÜV Rheinland expressly agreed in writing specifically stating that ensuring the deadlines is the contractual obligation of TÜV Rheinland.

6. The client's obligation to cooperate

6.1 The client shall guarantee that all cooperation required on its part, its agents or third parties will be provided in good time and at no cost to TÜV Rheinland.

6.2 Design documents, supplies, auxiliary staff, etc. necessary for performance of the services shall be made available free of charge by the client. Moreover, collaborative action of the client must be undertaken in accordance with legal provisions, standards, safety regulations and accident prevention instructions. And the client represents and warrants that:

a) it has required statutory qualifications;

b) the product, service or management system to be certified complies with applicablelaws and regulations; and

c) it doesn't have any illegal and dishonest behaviours or is not included in the list of Enterprises with Serious Illegal and Dishonest Acts of People's Republic of China.

If the client breaches the aforesaid representations and warranties, TÜV Rheinland is entitled to i) immediately terminate the contract/order without prior notice; and ii) withdraw the issued testing report/certificates if any.

6.3 The client shall bear any additional cost incurred on account of work having to be redone or being delayed as a result of late, incorrect or incomplete information provided by or lack of proper cooperation from the client. Even where a fixed or maximum price is agreed, TÜV Rheinland shall be entitled to charge extra fees for such additional expense.

7. Prices

7.1 If the scope of performance is not laid down in writing when the order is placed, invoicing shall be based on costs actually incurred. If no price is agreed in writing, invoicing shall be made in accordance with the price list of TÜV Rheinland valid at the time of performance.

7.2 Unless otherwise agreed, work shall be invoiced according to the progress of the work.

7.3 If the execution of an order extends over more than one month and the value of the contract or the agreed fixed price exceeds €2,500.00 or equivalent value in local currency, TÜV Rheinland may demand payments on account or in instalments.

8. Payment terms

8.1 All invoice amounts shall be due for payment within 30 days of the invoice date without deduction on receipt of the invoice. No discounts and rebates shall be granted.

8.2 Payments shall be made to the bank account of TÜV Rheinland as indicated on the invoice, stating the invoice and client numbers.

8.3 In cases of default of payment, TÜV Rheinland shall be entitled to claim default interest at the applicable short term interest rate publicly announced by a reputable commercial bank in the country where TÜV Rheinland is located. At the same time, TÜV Rheinland reserves the right to claim further damages.

8.4 Should the client default in payment of the invoice despite being granted a reasonable grace period, TÜV Rheinland shall be entitled to cancel the contract, withdraw the certificate, claim damages for non-performance and refuse to continue performance of the contract.

8.5 The provisions set forth in article 8.4 shall also apply in cases involving returned cheques, cessation of payment, commencement of insolvency proceedings against the client's assets or cases in which the commencement of insolvency proceedings has been dismissed due to lack of assets.

8.6 Objections to the invoices of TÜV Rheinland shall be submitted in writing within two weeks of receipt of the invoice.

8.7 TÜV Rheinland shall be entitled to demand appropriate advance payments.

8.8 TÜV Rheinland shall be entitled to raise its fees at the beginning of a month if overheads and/or purchase costs have increased. In this case, TÜV Rheinland shall notify the client in writing of the rise in fees. This notification shall be issued one month prior to the date on which the rise in fees shall come into effect (period of notice of changes in fees). If the rise in fees remains under 5% per contractual year, the client shall not have the right to terminate the contract. If the rise in fees exceeds 5% per contractual year, the client shall be entitled to terminate the contract by the end of the period of notice of changes in fees. If the contract is not terminated, the changed fees shall be deemed to have been agreed upon by the time of the expiry of the notice period.

8.9 Only legally established and undisputed claims may be offset against claims by TÜV Rheinland.

8.10 TÜV Rheinland shall have the right at all times to setoff any amount due or payable by the client, including but not limited to setoff against any fees paid by the client under any contracts, agreement and/or orders/quotations reached with TÜV Rheinland.

9. Acceptance of work

9.1 Any part of the work result ordered which is complete in itself may be presented by TÜV Rheinland for acceptance as an instalment. The client shall be obliged to accept it immediately.

9.2 If acceptance is required or contractually agreed in an individual case, this shall be deemed to have taken place two (2) weeks after completion and handover of the work, unless the client refuses acceptance within this period stating at least one fundmental breach of contract by TÜV Rheinland.

9.3 The client is not entitled to refuse acceptance due to insignificant breach of contract by TÜV Rheinland.

9.4 If acceptance is excluded according to the nature of the work performance of TÜV Rheinland, the completion of the work shall take its place.

9.5 During the Follow-Audit stage, if the client was unable to make use of the time windows provided for within the scope of a certification procedure for auditing/performance by TÜV Rheinland and the certificate therefore to be withdrawn (e.g. performance of surveillance audits), or if the client cancels or postpones a confirmed audit date within two (2) weeks before the agreed date, TÜV Rheinland is entitled to immediately charge a lump-sum compensation of 10% of the order amount as compensation for expenses. The client reserves the right to prove that the TÜV Rheinland has incurred no damage whatsoever or only a considerably lower damage than the above lump sum.

9.6 Insofar as the client has undertaken in the contract to accept services, TÜV Rheinland shall also be entitled to charge lump-sum damages in the amount of 10% of the order amount as compensation for expenses if the service is not called within one year after the order has been placed. The client reserves the right to prove that the TÜV Rheinland has incurred no damage whatsoever or only a considerably lower damage than the above mentioned lump sum.

10. Confidentiality

10.1 For the purpose of these terms and conditions, "confidential information" means all know-how, trade secrets, documents, images, drawings, expertise, information, data, test results, reports, samples, project documents, pricing and financial information, customer and supplier information, and marketing techniques and materials, tangible or intangible, that are supplied, transferred or otherwise disclosed by one Party (the "disclosing party") to the other Party (the "receiving party"), in writing or orally, in printed or electronic format. Confidential information is expressly not the data and know-how collected, compiled or otherwise obtained by TÜV Rheinland (non-personal and not proprietary to the client) within the scope of the provision of services by TÜV Rheinland. TÜV Rheinland is entitled to store, use, further develop and pass on the data obtained in connection with the provision of services for the purposes of developing new services, improving services and analysing the provision of services.

10.2 The disclosing party shall mark all confidential information disclosed in written form as confidential before passing it onto the receiving party. The same applies to confidential information transmitted by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information within five working days of oral disclosure. Where the disclosing party fails to do so within the stipulated period, the receiving party shall not take any confidentiality obligations hereunder towards such information. The client shall avoid using any third party platform and/or system (e.g. Wechat, etc. Unauthorized by TÜV Rheinland) to send any confidential information to TÜV Rheinland. Instead, the client shall send any confidential information to company email of TÜV Rheinland employees through its company email. If the client suffers from any losses or damages due to any theft or leakages to be caused by the adoption of any unauthorized confidential information sharing methods mentioned above, TÜV Rheinland shall be waived for any compensation liabilities.

10.3 All confidential information which the disclosing party transmits or otherwise discloses to the receiving party and which is created during performance of work by TÜV Rheinland:

a) may only be used by the receiving party for the purposes of performing the contract, unless expressly otherwise agreed in writing by the disclosing party;

b) may not be copied, distributed, published or otherwise disclosed by the receiving party, unless this is necessary for fulfilling the purpose of the contract or TÜV Rheinland is required to pass on confidential information, inspection reports or documentation to the government authorities, judicial court, accreditation bodies or third parties (including but not limited to the relevant direct and/or indirect proposed purchasers, vehicle manufacturers/whole equipment manufacturers, test standards or test requirements providers of the client's test products and/or certified products, etc.) that are involved in the performance of the contract;

c) must be treated by the receiving party with the same level of confidentiality as the receiving party uses to protect its own confidential information, but never with a lesser level of confidentiality than that which is reasonably required.

10.4 The receiving party may disclose any confidential information received from the disclosing party only to those of its employees who need this information to perform the services required for the contract. The receiving party undertakes to oblige these employees to observe the same level of secrecy as set forth in this confidentiality clause.

10.5 Information is not subject to confidentiality if the receiving party can furnish proof that:

a) it was generally known at the time of disclosure or has become general knowledge without violation of this confidentiality clause by the receiving party; or

b) it was disclosed to the receiving party by a third party entitled to disclose this information; or

c) the receiving party already possessed this information prior to disclosure by the disclosing party; or

d) the receiving party developed it itself, irrespective of disclosure by the disclosing party, shall not be deemed to constitute "confidential information" as defined in this confidentiality clause.

10.6 All confidential information shall remain the sole property of the disclosing party. The receiving party hereby agrees to immediately (i) return all confidential information, including all copies, to the disclosing party, and/or (ii) on request by the disclosing party, to destroy all confidential information, including all copies, and confirm the destruction of this confidential information to the disclosing party in writing, at any time if so requested by the disclosing party but at the latest set and without special request after termination or expiry of the contract. This does not extend to include reports and certificates prepared for the client solely for the purpose of fulfilling the obligations under the contract, which shall remain with the client. However, TÜV Rheinland is entitled to make file copies of such reports, certificates and confidential information that forms the basis for preparing these reports and certificates in order to evidence the correctness of its results and for general documentation purposes required by laws, regulations and the requirements of working procedures of TÜV Rheinland.

10.7 From the start of the contract and for a period of three years after termination or expiry of the contract, the receiving party shall maintain strict secrecy of all confidential information and shall not disclose this information to any third parties or use it for itself.

11. Copyrights and rights of use, publications

11.1 TÜV Rheinland shall retain all exclusive copyrights in the reports, expert reports/opinions, test reports/results, results, calculations, presentations etc. prepared by TÜV Rheinland, unless otherwise agreed by the parties in a separate agreement. As the owner of the copyrights, TÜV Rheinland is free to grant others the right to use the work results for individual or all types of use ("right of use")

11.2 The client receives a simple, unlimited, non-transferable, non-sublicensable right of use to the contents of the work results produced within the scope of the contract, unless otherwise agreed by the parties in a separate agreement. The client may only use such reports, expert reports/opinions, test reports/results, results calculations, presentations etc. prepared within the scope of the contract for the contractually agreed purpose.

11.3 The transfer of right of use of the generated work results regulated in clause 11.2. of the GTCB is subject to full payment of the remuneration agreed in favour of TÜV Rheinland.

11.4 The client may use work results only complete and unshortened. The client may only pass on the work results in full unless TÜV Rheinland has given its prior written consent to the partial passing on of work results.

11.5 Any publication or duplication of the work results for advertising purposes or any further use of the work results beyond the scope regulaed in clause 11.2, and any quotaion of the introduction of TÜV Rheinland need the prior written approval of TÜV Rheinland in each individual case. Besides, the client ensures that the aforesaid use shall comply with relevant applicable laws, regulations and relevant rules (including but not limited to specific applicable testing and certification rules, etc.).

11.6 TÜV Rheinland may revoke a once given approval according to clause 11.5 at any time without stating reasons. In this case, the client is obliged to stop the transfer of the work results immediately at his own expense and, as far as possible, to withdraw publications.

11.7 The consent of TÜV Rheinland to publication or duplication of the work results does not entitle the client to use the corporate logo, corporate design or test/certification mark of TÜV Rheinland.

12. Liability of TÜV Rheinland

12.1 Irrespective of the legal basis, to the fullest extent permitted by applicable law, in the event of a breach of contractual obligations or tort, the liability of TÜV Rheinland for all damages, losses and reimbursement of expenses caused by TÜV Rheinland, its legal representatives and/or employees shall be limited to: (i) in the case of a contract with a fixed overall fee, three times the overall fee for the entire contract; (ii) in the case of a contract for annually recurring services, the agreed annual fee; (iii) in the case of a contract expressly charged on a time and material basis, a maximum of 20,000 Euro or equivalent amount in local currency; and (iv) in the case of a framework agreement that provides for the possibility of placing individual orders, three times of the fee for the individual order under which the damages or losses have occurred. Notwithstanding the above, in the event that the total and accumulated liability calculated according to the foregoing provisions exceeds 2.5 Million Euro or equivalent amount in local currency, the total and accumulated liability of TÜV Rheinland shall be only limited to and shall not exceed the said 2.5 Million Euro or equivalent amount in local currency.

12.2 The limitation of liability according to article 12.1 above shall not apply to damages and/or losses caused by malice, intent or gross negligence on the part of TÜV Rheinland or its vicarious agents. Such limitation shall not apply to damages for a person's death, physical injury or illness.

12.3 In cases involving a fundamental breach of contract, TÜV Rheinland will be liable even where minor negligence is involved. For this purpose, a "fundamental breach" is breach of a material contractual obligation, the performance of which permits the due performance of the contract. Any claim for damages for a fundamental breach of contract shall be limited to the amount of damages reasonably foreseen as a possible consequence of such breach of contract at the time of the breach (reasonably foreseeable damages), unless any of the circumstances described in article 12.2 applies.

12.4 TÜV Rheinland shall not be liable for the acts of the personnel made available by the client to support TÜV Rheinland in the performance of its services under the contract, unless such personnel made available is regarded as vicarious agent of TÜV Rheinland. If TÜV Rheinland is not liable for the acts of the personnel made available by the client under the foregoing provision, the client shall indemnify TÜV Rheinland against any claims made by third parties arising from or in connection with such personnel's acts.

12.5 Unless otherwise contractually agreed in writing, TÜV Rheinland shall only be liable under the contract to the client.

12.6 The limitation periods for claims for damages shall be based on statutory provisions.

12.7 None of the provisions of this article 12 changes the burden of proof to the disadvantage of the client.

13. Export control

13.1 When passing on the services provided by TÜV Rheinland or parts thereof to third parties in Greater China or other regions, the client must comply with the respectively applicable regulations of national and international export control law.

13.2 The performance of a contract with the client is subject to the proviso that there are no obstacles to performance due to national or international foreign trade legislations or embargos and/or sanctions. In the event of a violation, TÜV Rheinland shall be entitled to terminate the contract with immediate effect and the client shall compensate for the losses incurred thereof by TÜV Rheinland.

14. Data protection notice

The client understands and agrees that TÜV Rheinland processes personal data (including but not limited to personal information) of the client and its related parties (including but not limited to the supplier of the client) for the purpose of fulfilling this contract. The client confirms that it has obtained the prior consent of the data subject, which entitles TÜV Rheinland to access, use, or process the personal data that the client collected or processed by itself and transferred to TÜV Rheinland. For certain services, we may also process sensitive personal data. TÜV Rheinland will use and process the data in accordance with the relevant legal basis. If any personal data has to be disclosed or transferred to any third party or any overseas party outside of the district in which the personal data was collected, the client also confirms that it has obtained the prior consent of the data subject. TÜV Rheinland will carry out cross-border data transmission and protect the data in compliance with the privacy and personal data security related laws and regulations in China and the local country. TÜV Rheinland will take measures to avoid any leakage, abuse, manipulation, damage or unauthorized access of personal data. The personal data will be deleted immediately as soon as a corresponding reason for deletion arises. Data subjects may exercise the following rights: right of information, right of decision, right of rectification, right of deletion, right of processing limitation, right of objection, right of data transferability. In addition, persons concerned by the data processing have the right to revoke their consent at any time with effect for the future, as well as the right to file a complaint with the competent data protection supervisory authority. For further details on the processing of personal data by TÜV Rheinland as the person responsible or contract processor, please refer to the respective data protection information. You can contact the Group Data Protection Officer of TÜV Rheinland by e-mail at dataprotection@tuv.com or by post at the following address: TÜV Rheinland AG, c/o Group Data Protection Officer, Am Grauen Stein, 51105 Cologne, Germany.

15. Retention of test material and documentation

15.1 The test samples submitted by the client to TÜV Rheinland for testing will be scrapped following testing or will be returned to the client at the client's expense. The only exceptions are test samples, which are placed in storage on the basis of statutory regulations or of another agreement with the client.

15.2 Charges apply if the test samples are stored at the premises of TÜV Rheinland. The cost of placing a test sample into storage will be disclosed to the client in the quotation.

15.3 If reference samples or documentations are given to the client to be placed in storage at their premises, the reference samples or documentations must be made available to TÜV Rheinland upon request promptly and free of charge. If the client, in response to such a request, is incapable of making available the reference samples and/or documentation, any liability claims for material and pecuniary damage resulting from the respective testing and certification that is brought forward by the client against TÜV Rheinland shall be voided.

15.4 The retention period for the documentation shall be 10 (ten) years after the expiry of the test mark certificates or shall meet the applicable legal requirements for EU/EC certificates of conformity and GS mark certificates.

15.5 The costs of the handover and dispatch of the test samples for storage on the client's premises are borne by the client. TÜV Rheinland will be liable for the loss of test samples or reference samples from the laboratories or warehouses of TÜV Rheinland only in case of gross negligence.

16. Termination of the contract

16.1 Notwithstanding clause 3.3 of the GTCB, TÜV Rheinland and the client are entitled to terminate the contract in its entirety or, in the case of services combined in one contract, each of the combined parts of the contract individually and independently of the continuation of the remaining services with six (6) months' notice to the end of the contractually agreed term. The notice period shall be shortened to six (6) weeks in case TÜV Rheinland is prevented from performing the services due to a loss or a suspension of its accreditation or notification.

16.2 For good causes, TÜV Rheinland may consider giving a written notice to the client to terminate the contract without bearing any liabilities and the client shall pay the relevant service fees for the services provided by TÜV Rheinland due to the termination date of the contract. The aforesaid good causes includes but not limited to the following:

a) the client does not immediately notify TÜV Rheinland of changes in the conditions within the company which are relevant for certification or signs of such changes;

b) the client misuses the certificate or certification mark or uses it in violation of the contract;

c) in the event of several consecutive delays in payment (at least three times);

d) a substantial deterioration of the financial circumstances of the client occurs and as a result the payment claims of TÜV Rheinland under the contract are considerably endangered and TÜV Rheinland cannot reasonably be expected to continue the contractual relationship.

e) in the event of any serious misrepresentation, be it by intentional fraud or grossly negligent behavior of the managers, employees or agents of the client;

f) if TÜV Rheinland, for reasons beyond its control, is temporarily or finally not able or entitled to continue or finalize the performance of the service, e.g. in case of force majeure, government interference, sanctions, loss of accreditation or notification, or other.

g) if the country/region involved in the whole contract or the specific service project in the contract does not belong to the insurance coverage applicable to TÜV Rheinland, and TÜV Rheinland believes that there is a risk or some risks beyond its control to continue to perform the contract.

16.3 In the event of termination with written notice by TÜV Rheinland for good cause, TÜV Rheinland shall be entitled to a lump-sum claim for damages against the client if the conditions of a claim for damages exist. In this case, the client shall owe 15% of the remuneration to be paid until the end of the fixed contract term as lump-sum compensation. The client reserves the right to prove that there is no damage or a considerably lower damage, TÜV Rheinland reserves the right to prove a considerably higher damage in individual cases.

16.4 TÜV Rheinland is also entitled to terminate the contract with written notice if the client has not been able to make use of the time windows for auditing /service provision provided by TÜV Rheinland within the scope of a certification procedure and the certificate therefore has to be withdrawn (for example during the performance of monitoring audits). Clause 16.3 applies accordingly.

17. Force Majeure

17.1. "Force Majeure" means the occurrence of an event or circumstance that prevents or impedes a Party from performing one or more of its contractual obligations under the contract, if and to the extent that that Party proves: (a) that such impediment is beyond its reasonable control; and (b) that it could not reasonably have been foreseen at the time of the conclusion of the contract; and (c) that the effects of the impediment could not reasonably have been avoided or overcome by the affected Party .

17.2. In the absence of proof to the contrary, the following events affecting a Party shall be presumed to fulfil conditions (a) and (b) under paragraph 1 of this Clause: (i) war (whether declared or not), hostilities, invasion, act of foreign enemies, extensive military mobilization; (ii) civil war, riot, rebellion and revolution, military or usurped power, insurrection, act of terrorism, sabotage or piracy; (iii) currency and trade restriction, embargo, sanction; (iv) act of authority whether lawful or unlawful, compliance with any law or governmental order, expropriation, seizure of works, requisition, nationalization; (v) plague, epidemic, natural disaster or extreme natural event; (vi) explosion, fire, destruction of equipment, prolonged break-down of transport, telecommunication, information system or energy; (vii) general labor disturbance such as boycott, strike and lock-out, go-slow, occupation of factories and premises

17.3. The Party successfully invoking this Clause is relieved from its duty to perform its obligations under the contract and from any liability in damages or from any other contractual remedy for breach of contract, from the time at which the impediment causes inability to perform, provided that the notice thereof is given without delay. If notice thereof is not given without delay, the relief is effective from the time at which notice thereof reaches the other Party. Where the effect of the impediment or event invoked is temporary, the above consequences shall apply only as long as the impediment invoked impedes performance by the affected Party. Where the duration of the impediment invoked has the effect of substantially depriving the contracting Parties of what they were reasonably entitled to expect under the contract, either Party has the right to terminate the contract by notification within a reasonable period to the other Party. Unless otherwise agreed, the Parties expressly agree that the contract may be terminated by either Party if the duration of the impediment exceeds 120 days.

18. Hardship

18.1 The Parties are bound to perform their contractual duties even if events have rendered performance more onerous than could reasonably have been anticipated at the time of the conclusion of the contract.

18.2. Notwithstanding paragraph 1 of this Clause, where a Party proves that:

(a) the continued performance of its contractual duties has become excessively onerous due to an event beyond its reasonable control which it could not reasonably have been expected to have taken into account at the time of the conclusion of the contract; and that

(b) it could not reasonably have avoided or overcome the event or its consequences, the Parties are bound, within a reasonable time of the invocation of this Clause, to negotiate alternative contractual terms which reasonably allow to overcome the consequences of the event.

18.3. Where Clause 18.2 applies, but where the Parties have been unable to agree alternative contractual terms as provided in that paragraph, the Party invoking this Clause is entitled to terminate the contract, but cannot request adaptation by the judge or arbitrator without the agreement of the other Party.

19. Partial invalidity, written form, place of jurisdiction and dispute resolution

19.1 All amendments and supplements must be in writing in order to be effective. This also applies to amendments and supplements to this clause 17.1.

19.2 Should one or several of the provisions under the contract and/or these terms and conditions be or become ineffective, the contracting parties shall replace the invalid provision with a legally valid provision that comes closest to the content of the invalid provision in legal and commercial terms.

19.3 Unless otherwise stipulated in the contract, the governing law of the contract and these terms and conditions shall be chosen following the rules as below:

a) if TÜV Rheinland in question is legally registered and existing in the People's Republic of China, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of the People's Republic of China.

b) if TÜV Rheinland in question is legally registered and existing in Taiwan, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of Taiwan.

c) if TÜV Rheinland in question is legally registered and existing in Hong Kong, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of Hong Kong.

19.4 Any dispute in connection with the contract and these terms and conditions or the execution thereof shall be settled friendly through negotiations.

Unless otherwise stipulated in the contract, if no settlement or no agreement in respect of the extension of the negotiation period can be reached within two months of the arising of the dispute, the dispute shall be submitted:

a) in the case of TÜV Rheinland in question being legally registered and existing in the People's Republic of China, to China International Economic and Trade Arbitration Commission (CIETAC) to be settled by arbitration under the Arbitration Rules of CIETAC in force when the arbitration is submitted. The arbitration shall take place in Beijing, Shanghai, Shenzhen or Chongqing as appropriately chosen by the claiming party.

b) in the case of TÜV Rheinland in question being legally registered and existing in Taiwan, to Chinese Arbitration Association, Taipei to be arbitrated in accordance with its then current Rules of Arbitration. The arbitration shall take place in Taipei.

c) in the case of TÜV Rheinland being legally registered and existing in Hong Kong, to Hong Kong International Arbitration Centre (HKIAC) to be settled by arbitration under the HKIAC Administered Arbitration Rules in force when the Notice of Arbitration is submitted in accordance with these rules. The arbitration shall take place in Hong Kong.

The decision of the relevant arbitration tribunal shall be final and binding on both parties. The arbitration fee shall be borne by the losing party.

Product: Coin Manganese Dioxide Lithium Battery

Type Designation: CR1216, CR1220, CR1225, CR1616, CR1632, CR2016, CR2025, CR2032, CR2412, CR2430, CR2450, CR2477, CR3032

Figure 1 View 1 of battery (CR2450 as representative, final label see page 11~23 in report)

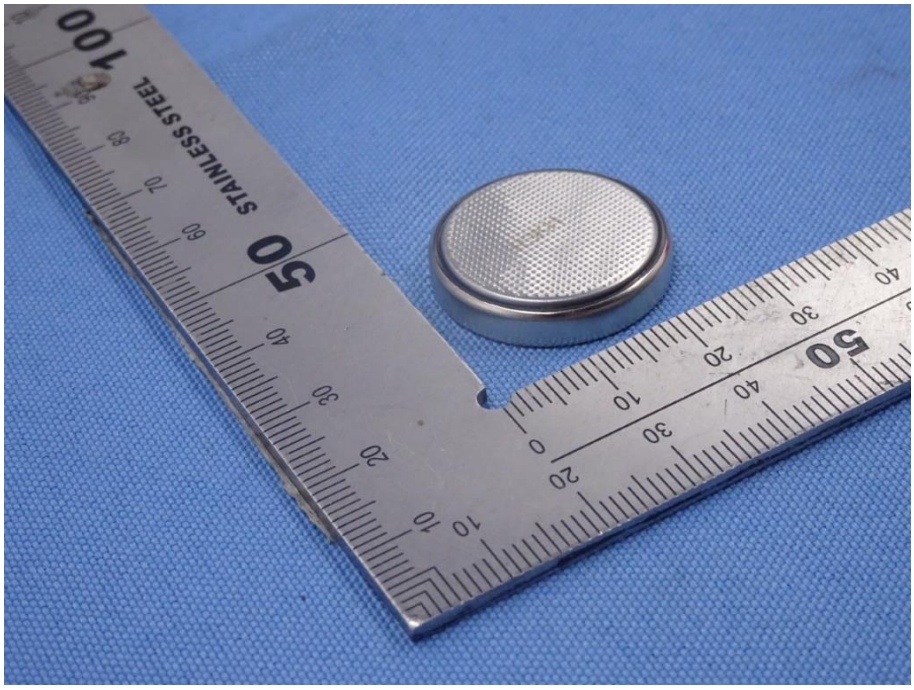


Figure 2 View 2 of battery (CR2450 as representative, final label see page 11~23 in report)