

## SAFETY DATA SHEET

### DENTAL CURING LIGHTS RECHARGABLE BATTERIES

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Replacement Part No.	Battery Model No.	Nominal Voltage	Typical Capacity	Weight	Dimensions
C01/2-1	NCM18650 2600mAh	3.6V	2600mAh, 9.36Wh	46.5g	Φ18.5mm×69.0mm
C01/2-M-1	NCM14500 850mAh	3.6V	850mAh, 3.06Wh	22.5g	Φ14.2mm×53.0mm

<b>Name</b>	Premium Plus Dental Curing Light Batteries
<b>Description</b>	Rechargeable Li-ion Battery for use in Premium Plus Dental Curing Lights

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

<b>Product Use</b>	Rechargeable Li-ion Battery for use in Premium Plus Dental Curing Lights
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**1.3. Details of the supplier of the material safety data sheet**

<b>Manufacturer</b>	Premium Plus International Ltd. 1001, Yuen Long Trading Centre No. 33, Wang Yip Street West Yuen Long, N.T. Hong Kong	<b>EU Representative</b>	Premium Plus Poland sp. z o.o. ul. Bukowska 27 62-081 Wysogotowo Poland
		<b>UK Representative</b>	Premium Plus UK Ltd. Unit 2, Knighton Heath Industrial Estate, Bournemouth, Dorset BH11 8NE UK
<b>Testing Laboratory</b>	Shenzhen NCT Testing Technology Co., Ltd. 1 / F, No. B Building, Mianshang Younger Pioneer Park, Hangcheng Road, Gushu Xixiang Street, Baoan District, Shenzhen, Guangdong, China	<b>Report No.</b>	NCT20048891XM1-1 NCT20048889XM1-1
<b>Email</b>	(POLAND) <a href="mailto:regulatory@premiumpluspl.com">regulatory@premiumpluspl.com</a> (UK) <a href="mailto:regulatory@premiumplusuk.com">regulatory@premiumplusuk.com</a>		

**1.4. Emergency telephone number**

<b>Telephone</b>	(POLAND) +48 61 880 10 94 (UK) +44 (0) 1202 611 011
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**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

<b>Hazard Description</b>	Not dangerous with normal use. Do not dismantle, open or shred the battery ingredients contained within or their ingredients products could be harmful. Classification according to GHS Not a dangerous substance according to GHS.
<b>Primary Route(s) of Exposure</b>	Inhalation, Ingestion, Skin contact and Eye contact.
<b>Potential Health Effects</b>	<b>Eye</b> - Eye contact with contents of an open battery can cause severe irritation or burns to the eye. <b>Skin</b> - Skin contact with contents of an open battery can cause severe irritation or burns to the skin. <b>Ingestion</b> - The battery ingredients contained within or their ingredients products can cause serious chemical burns of mouth, oesophagus, and gastrointestinal tract. <b>Inhalation</b> - Vapours or mists from a ruptured battery may cause respiratory irritation

**2.2. Label elements**

Classification according to Regulation(EC) No 1272/2008 [CLP]

<b>Precautionary statement(s)</b>	
<b>Prevention</b>	P280: Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	P305: IF IN EYES: P351: Rinse cautiously with water for several minutes. P313: Get medical advice/attention. P303+P361+P353: If on skin (/hair): Take off immediately all contaminated clothing. Rinse skin with water [/shower]. P314: Get medical advice/attention if you feel unwell. P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330: Rinse mouth. P331: Do NOT induce vomiting. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
<b>Storage</b>	P273: Avoid release to the environment. P103: Read label before use.
<b>Disposal</b>	P501: Dispose of in compliance with governmental regulation. (EC 1975L0442-20/11/2003)

**2.3. Other Hazards**

	N/A
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**SECTION 3: Composition/ information on ingredients**

**3.1. Substances**

N/A

**3.2. Mixtures**

Chemical Name	Concentration or concentration ranges (%)	CAS Number
Lithium Cobalt Oxide	35-38	12190-79-3
Graphite	20-22	7782-42-5
Copper	9-10	7440-50-8
Aluminium	5-6	7429-90-5
Ethylene carbonate	14-16	96-49-1
Polypropylene	5-6	9003-07-0
Carbonate, methyl ethyl	4-5	623-53-0
Phosphate(1-), hexafluoro-, lithium	5-6	21324-40-3

NOTE: CAS number is Chemical Abstract Service Registry Number

N/A = Not Applicable

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

<b>Inhalation</b>	Remove source of contamination or move victim to fresh air. Obtain medical advice.
<b>Eye contact</b>	Irrigate with flowing water for 15 minutes. If irritation persists, consult a physician.
<b>Skin contact</b>	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.
<b>Ingestion</b>	Please rinse mouth thoroughly with water. Induce vomiting under the guidance of professional personage. Please seek medical treatment in time.

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

Please use water, dry sand and other proper fire extinguishing media.

**5.2. Special hazards arising from the substance or mixture**

Toxic fumes, gases or vapours may evolve on burning.  
Hazardous combustion products: Carbon monoxide, carbon dioxide, lithium oxide fumes and so on.

**5.3. Advise for firefighters**

Toxic fumes, gases or vapours may evolve on burning. The firemen should put on gas masks and full fire-fighting suits.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Restrict access to area until completion of clean-up. Do not touch the spilled material. Wear adequate personal protective equipment as indicated in Section 8.

**6.2. Environmental precautions**

Prevent material from contaminating soil and from entering sewers or waterways.

**6.3. Methods and material for containment and cleaning up**

Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately.

**6.4. Reference to other sections**

Absorb spilled material with an inert absorbent (dry sand or earth). Scoop contaminated absorbent into an acceptable waste container. Collect all contaminated absorbent and dispose of according to directions in Section 13. Scrub the area with detergent and water; collect all contaminated wash water for proper disposal.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Don't handling the batteries in manner that allows terminals to short circuit. Do not open, disassemble, crush or burn battery.

**7.2. Conditions for safe storage, including any incompatibilities**

If the battery is subject to storage for such a long term as more than 3 months, it is recommended to recharge the battery periodically.

C01/2-1 (NCM18650 2600mAh)	C01/2-M-1 (NCM14500 850mAh)
1 month: -20°C~45°C, 60±25%R.H.	Less than 1 month: -20°C~60°C.
3 months: -20°C~45°C, 60±25%R.H.	Less than 12 months: -20°C~20°C.
1 year: -20°C~20°C, 60±25%R.H.	

1 month: -20°C~45°C, 60±25%R.H.  
3 months: -20°C~45°C, 60±25%R.H.  
1 year: -20°C~20°C, 60±25%R.H.

	<ul style="list-style-type: none"> <li>- Do not storage the battery haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects.</li> <li>- Keep out of reach of children.</li> <li>- Do not expose the battery to heat or fire. Avoid storage in direct sunlight.</li> <li>- Do not store together with oxidizing and acidic materials.</li> </ul>
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<b>7.2. Specific end use(s)</b>	Rechargeable Li-ion Battery for use in Premium Plus Dental Curing Lights
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**SECTION 8: Exposure controls**

<b>8.1. Control parameters</b>	No engineering controls are required for handling batteries that have not been damaged. Personal protective equipment's for damaged batteries should include chemical resistant gloves and safety glasses.
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<b>8.2. Exposure controls</b>	
<b>Respiratory protection</b>	In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Respiratory Protection is not necessary under conditions of normal use. Not necessary under conditions of normal use.
<b>Protective Gloves</b>	Not necessary under conditions of normal use.
<b>Other Protective Clothing or Equipment</b>	Not necessary under conditions of normal use.
<b>Other</b>	Personal Protection is recommended for venting battery: Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

**SECTION 9: Physical and chemical properties**

<b>9.1. Information on basic physical and chemical properties</b>	
<b>Appearance</b>	Solid
<b>Colour</b>	Blue
<b>Odour</b>	Odourless
<b>pH</b>	No data is available
<b>Melting point/freezing point</b>	No data is available
<b>Boiling Point, initial boiling point</b>	No data is available
<b>Flash point</b>	No data is available
<b>Upper/lower flammability or explosive limits</b>	No data is available
<b>Vapor Pressure</b>	No data is available
<b>Vapor Density (Air = 1)</b>	No data is available
<b>Density/relative density</b>	No data is available
<b>Solubility in Water</b>	Insoluble
<b>n-octanol/water partition coefficient</b>	No data is available
<b>Auto-ignition temperature</b>	No data is available
<b>Decomposition temperature</b>	No data is available
<b>Odour threshold</b>	No data is available
<b>Evaporation rate</b>	No data is available
<b>Flammability (soil, gas)</b>	No data is available
<b>Viscosity</b>	No data is available
<b>9.2. Other Information</b>	
	N/A

**SECTION 10: Stability and reactivity**

<b>10.1. Reactivity</b>	
	If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalis, halogenated hydrocarbons.
<b>10.2. Chemical stability</b>	
	Stable under normal temperatures and pressures.
<b>10.4. Conditions to avoid</b>	
	Heat above 70°C or Incinerate, Deform, Mutilate, Crush, Disassemble, Overcharge, Short circuit, Expose over a long period to humid conditions.
<b>10.6. Hazardous decomposition products</b>	
	Toxic Fumes, and may form peroxides.

**SECTION 11: Toxicological information**

<b>11.1. Irritation</b>	
	In the event of exposure to internal contents, vapor fumes may be very irritating to the eyes and skin.

<b>11.2. Sensitization</b>	
	No data is available
<b>11.3. Reproductive Toxicity</b>	
	No data is available
<b>11.4. Toxicologically Synergistic Materials</b>	
	No data is available

**SECTION 12: Ecological information**

<b>12.1. General Note</b>	
	Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
<b>12.2. Anticipated behaviour of a chemical product in environment/possible environmental impact/ ecotoxicity</b>	
	No data is available
<b>12.3. Mobility in soil</b>	
	No data is available
<b>12.4. Persistence and Degradability</b>	
	No data is available

**SECTION 13: Disposal considerations**

<b>13.1. Waste treatment Methods</b>	
	Recycle or dispose of in accordance with government, state & local regulations.
<b>13.2. Attention for Waste Treatment</b>	
	Deserted batteries couldn't be treated as ordinary trash. Couldn't be thrown into fire or placed in high temperature. Couldn't be dissected, pierced, crushed or treated similarly. Best way is recycling.

**SECTION 14: Transport information**

<b>14.1. General</b>	
	This report applies to by sea, by air and by land;  The Li-ion Battery (model: C01/2-1 (CNCM18650 2600mAh) and C01/2-M-1 (NCM14500 850mAh)) tested according to the requirements of the UNITED NATIONS "Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria" Part III, subsection 38.3;  The Li-ion Battery was protected so as to prevent short circuits. This includes protection against contact with conductive materials within the same packaging that could lead to short circuit;  The packaging shall be adequate to avoid mechanical damage during transport, handling and stacking.  The package must be handled with care and that a flammability hazard exists if the package is damaged.

<b>14.2. Air – ICAO, IATA</b>	
The Li-ion Battery can be shipped by air in according to Section II/Section IB of PACKING INSTRUCTION 965, or Section II of PACKING INSTRUCTION 966~967 of the 2021 IATA Dangerous Goods regulations 62 <sup>nd</sup> Edition.	
<b>UN Number</b>	UN3480, UN3481
<b>UN Proper shipping name/Description (technical name)</b>	Lithium ion batteries or Lithium ion batteries contained in equipment or Lithium ion batteries packed with equipment
<b>UN Classification (Transport hazard class)</b>	Class 9 (PI965 Section IB) or N/A (PI965~967 Section II)

<b>14.3. Sea - IMDG</b>	
<b>UN Proper shipping name/Description (technical name)</b>	Lithium ion batteries or Lithium ion batteries contained in equipment or Lithium ion batteries packed with equipment
<b>UN Classification (Transport hazard class)</b>	N/A
<b>Marine pollutant(Y/N)</b>	N/A
<b>Special Provisions</b>	International maritime dangerous goods code (IMDG) 188, 230, 310, 348, 360, 376, 377.
<b>Other</b>	The battery is not restricted according to IMO IMDG Code (inc Amdt 39-18).

**SECTION 15: Regulatory information**

<b>15.2. Chemical safety assessment</b>	
	«Dangerous Goods Regulations» «Recommendations on the Transport of Dangerous Goods Model Regulations» «International Maritime Dangerous Goods» «Technical Instructions for the Safe Transport of Dangerous Goods» «Classification and code of dangerous goods» «Occupational Safety and Health Act» (OSHA) «Toxic Substance Control Act» (TSCA)

	<p>《Consumer Product Safety Act》 (CPSA)          《Federal Environmental Pollution Control Act》 (FEPCA)          《The Oil Pollution Act》 (OPA)          《Superfund Amendments and Reauthorization Act Title III (302/311/312/313)》 (SARA)          《Resource Conservation and Recovery Act》 (RCRA)          《Safety Drinking Water Act》 (CWA)          《California Proposition 65》          《Code of Federal Regulations》 (CFR)          《EU Battery Directive (2006/66/EC, 2013/56/EU)》          《Regulation (EC) No. 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)》          In accordance with all Federal, State and local laws.</p>
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**SECTION 16: Other information**

<b>16.1. Other information</b>	
	<p>The information above is believed to be accurate and represents the best information currently available to us. However, we makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation. This material safety data sheet provides guidelines for the safe handling and use of this product; it does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required. The data/information contained herein has been reviewed and approved for general release on the basis that this document contains no export controlled information.</p>