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

Name	Premium Plus Dental Curing Light Batteries		
Description	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			
Product Use	Rechargeable Li-ion Battery for use in Premium Plus Dental Curing Lights		
1.3. Details of the supplier of the material safety data sheet			
Manufacturer	Premium Plus International Ltd. 1001, Yuen Long Trading Centre No. 33, Wang Yip Street West Yuen Long, N.T. Hong Kong	**EU Representative**	Premium Plus Poland sp. z o.o. ul. Bukowska 27 62-081 Wysogotowo Poland
		UK Representative	Premium Plus UK Ltd. Unit 2, Knighton Heath Industrial Estate, Bournemouth, Dorset BH11 8NE UK
Testing Laboratory	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	**Report No.**	NCT20048891XM1-1 NCT20048889XM1-1
Email	(POLAND) regulatory@premiumpluspl.com (UK) regulatory@premiumplusuk.com		
1.4. Emergency telephone number			
Telephone	(POLAND) +48 61 880 10 94 (UK) +44 (0) 1202 611 011		

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Hazard Description	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.
Primary Route(s) of Exposure	Inhalation, Ingestion, Skin contact and Eye contact.
Potential Health Effects	**Eye -** Eye contact with contents of an open battery can cause severe irritation or burns to the eye. **Skin -** Skin contact with contents of an open battery can cause severe irritation or burns to the skin. **Ingestion -** The battery ingredients contained within or their ingredients products can cause serious chemical burns of mouth, oesophagus, and gastrointestinal tract. **Inhalation -** Vapours or mists from a ruptured battery may cause respiratory irritation

2.2. Label elements

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

Precautionary statement(s)	
Prevention	P280: Wear protective gloves/protective clothing/eye protection/face protection.
Response	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.
Storage	P273: Avoid release to the environment. P103: Read label before use.
Disposal	P501: Dispose of in compliance with governmental regulation. (EC 1975L0442-20/11/2003)

2.3. Other Hazards

	N/A

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

Inhalation	Remove source of contamination or move victim to fresh air. Obtain medical advice.
Eye contact	Irrigate with flowing water for 15 minutes. If irritation persists, consult a physician.
Skin contact	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.
Ingestion	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 handing 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. 3 months: -20°C~45°C, 60±25%R.H. 1 year: -20°C~20°C, 60±25%R.H.	Less than 1 month: -20°C~60°C. Less than 12 months: -20°C~20°C.

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.

	- 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. - Keep out of reach of children. - Do not expose the battery to heat or fire. Avoid storage in direct sunlight. - Do not store together with oxidizing and acidic materials.
7.2. Specific end use(s)	
	Rechargeable Li-ion Battery for use in Premium Plus Dental Curing Lights

SECTION 8: Exposure controls

8.1. Control parameters	
	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.
8.2. Exposure controls	
Respiratory protection	In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Respiratory Protection is not necessary under conditions of normal use. Not necessary under conditions of normal use.
Protective Gloves	Not necessary under conditions of normal use.
Other Protective Clothing or Equipment	Not necessary under conditions of normal use.
Other	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

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

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

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

11.2. Sensitization	
	No data is available
11.3. Reproductive Toxicity	
	No data is available
11.4. Toxicologically Synergistic Materials	
	No data is available

SECTION 12: Ecological information

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

SECTION 13: Disposal considerations

13.1. Waste treatment Methods	
	Recycle or dispose of in accordance with government, state & local regulations.
13.2. Attention for Waste Treatment	
	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

14.1. General	
	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.
14.2. Air – ICAO, IATA	
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 62nd Edition.	
UN Number	UN3480, UN3481
UN Proper shipping name/Description (technical name)	Lithium ion batteries or Lithium ion batteries contained in equipment or Lithium ion batteries packed with equipment
UN Classification (Transport hazard class)	Class 9 (PI965 Section IB) or N/A (PI965~967 Section II)
14.3. Sea - IMDG	
UN Proper shipping name/Description (technical name)	Lithium ion batteries or Lithium ion batteries contained in equipment or Lithium ion batteries packed with equipment
UN Classification (Transport hazard class)	N/A
Marine pollutant(Y/N)	N/A
Special Provisions	International maritime dangerous goods code (IMDG) 188, 230, 310, 348, 360, 376, 377.
Other	The battery is not restricted according to IMO IMDG Code (inc Amdt 39-18).

SECTION 15: Regulatory information

15.2. Chemical safety assessment	
	《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)

	《Consumer Product Safety Act》(CPSA) 《Federal Environmental Pollution Control Act》(FEPCA) 《The Oil Pollution Act》(OPA) 《Superfund Amendments and Reauthorization Act TitleⅢ(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.

SECTION 16: Other information

16.1. Other information

	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.