



# SAFETY DATA SHEET

Product Name: Y5087828 / RECHARGEABLE LITHIUM ION BATTERY PACK (BRADY M511 PRINTER WITH LI-ION BATTERY) According to GB/T 16483, GB/T 17519

Date of Revision: - SDS No.: BRADY/CHN/009

Date of First Issue: 14.02.2023 Version: 1

## SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

- 1.1 GHS Product Identifier**
- Product Name (English) Y5087828 / RECHARGEABLE LITHIUM ION BATTERY PACK (BRADY M511 PRINTER WITH LI-ION BATTERY)
- Other means of identification Lithium Ion Battery Pack Packed in Equipment
- Model number Y5087828
- CAS number Not applicable (Article)
- 1.2 Details of the supplier of the Safety Data Sheet**
- Manufacturer Orient Technology (S) Ptd Ltd  
178, Paya Lebar Road,  
Singapore, 409030.
- U.S. Supplier Inventus Power, Inc.  
1200 Internationale Parkway,  
Woodridge, IL 60517 USA.  
Tel: (414) 358-6600 [8am – 5pm CT]
- European Supplier WH Brady NV  
Lindestraat 20, Industriepark C3,  
B-9240 Zele, Belgium.  
Tel: 0032/(0)52.45.79.05 [9am – 5pm]
- E-mail REACH\_Americas@bradycorp.com
- 1.3 Emergency telephone number** Infotrac: 1-800-535-5053 (U.S. and Canada) [24 hours]
- 1.4 Recommended use of the chemical and restrictions on use**
- Identified use(s) Brady M511 Printer with Lithium Ion Battery.
- Uses advised against None known.

## SECTION 2: HAZARD OVERVIEW

- 2.1 Emergency overview**  
Product as supplied: Solid article. Unlikely to cause harmful effects under normal conditions of handling and use.
- 2.2 According to GB30000-2013** Y5087828 / RECHARGEABLE LITHIUM ION BATTERY PACK (BRADY M511 PRINTER WITH LI-ION BATTERY) is considered to be an article. Unlikely to cause harmful effects under normal conditions of handling and use. This information is applicable to damaged, leaking or spilled product. This SDS is being provided as a courtesy to help assist in the safe handling and proper use of the product. Not classified as hazardous for supply.

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### 2.3 Label elements

Hazard pictogram(s)	None.
Signal word(s)	None.
Hazard statement(s)	None.
Precautionary statement(s)	
Prevention	None.
Response	None.
Storage	None.
Disposal	None.

### 2.4 Physical and chemical hazards

Physical and chemical hazards	None.
Health hazards	None.
Environmental hazards	None.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	%W/W	CAS No.
The following materials are part of the case of the battery:		
Aluminum (non-pyrophoric solid)	-	7429-90-5
Polycarbonate casing	-	-
The following materials are for the battery separator composite:		
Polyethylene	-	9002-88-4
Polyethylene terephthalate	-	25038-59-9
The following materials are in the electrolyte mixture in the battery:		
Diethyl carbonate	-	105-58-8
Dimethyl carbonate	-	616-38-6
Ethylene carbonate	-	96-49-1
Ethyl methyl carbonate	-	623-53-0
Lithium hexafluorophosphate (LiPF <sub>6</sub> )	-	21324-40-3
Propylene carbonate	-	108-32-7
The following materials are for the battery cathode:		
Aluminum (non-pyrophoric solid)	-	7429-90-5
Copper	-	7440-50-8
Lithium nickel cobalt aluminum oxides	-	131344-56-4
Nickel metal	-	7440-02-0
The following materials are for the battery anode:		
Carbon black	-	1333-86-4
Graphite [negative electrode]	-	7440-44-0
Silicon	-	7440-21-3
Steel (as alloy of Fe)	-	7439-89-6
The following materials are for the Anode Li-CMC binder:		
Carboxymethyl cellulose sodium salt	-	9004-32-4
Polyvinylidene fluoride	-	24937-79-9
Styrene butadiene rubber	-	9003-55-8

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## SECTION 4: FIRST AID MEASURES

Information caused by electrolyte mixture in the battery:

### 4.1 Description of first aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

Skin Contact

Remove/ take off immediately all contaminated clothing. Rinse skin with water/ shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Ingestion

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/ physician.

### 4.2 Most important symptoms and effects

Inhalation may cause moderate to severe irritation of the respiratory system. Skin and eye contact may cause burns or highly irritating

### 4.3 Suggestions for doctor

No antidotes known. Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

In case of fire use dry chemical to extinguish. Do not use water.

### 5.2 Special Hazards

Explosion risk in case of fire. Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback. May give off toxic fumes in a fire. Carbon monoxide, carbon dioxide. Hydrofluoric acid and hydrogen gas will be formed when electrolyte solution react with water.

### 5.3 Fire fighting measures and special precautions

Evacuate area and fight fire remotely due to the risk of explosion. A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

Information caused by electrolyte mixture in the battery:

### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Keep away from heat and sources of ignition. In case of fire: Evacuate area. Avoid breathing fume/ vapours. Avoid contact with skin and eyes. Wear protective gloves/ protective clothing/ eye protection/ face protection. In case of inadequate ventilation wear respiratory protection.

### 6.2 Environmental precautions

Stop leak if safe to do so. Prevent liquid entering watercourses, sewers and confined spaces.

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

Soak up with inert absorbent. Wipe up remainder. Transfer to a lidded container for disposal. Wash spill site with water and detergent.

## SECTION 7: HANDLING AND STORAGE

**7.1 Precautions for safe handling**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid friction, sparks, or other means of ignition.

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

Store in a well-ventilated, cool and dry place. Keep away from heat other ignition sources, acids, oxidising agents, alkalis, reducing agents, potassium tert-butoxide, direct sunlight, moist air, water, oils and solvents.

Storage Temperature  
Storage Life  
Incompatible materials

Less than 60 °C/ 140 °F  
Stable under normal conditions.  
Acids, oxidising agents, alkalis, reducing agents, potassium tert-butoxide, water, oils and solvents.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

No known hazards are associated with the use of this article.

**8.1 Occupational Exposure Limits**

Composition	CAS No.	MAC (mg/m <sup>3</sup> )	PC-TWA (mg/m <sup>3</sup> )	PC-STEL (mg/m <sup>3</sup> )	Remarks
-	-	-	-	-	-

**8.2 Biological limit value**

Composition	CAS No.	Biological monitoring Index	Occupational biological exposure limit	Sampling Time
-	-	-	-	-

**8.3 Appropriate engineering controls**

Provide adequate ventilation.

**8.4 Personal protection equipment**

Eye/face protection Not normally required.

Skin protection (Hand protection/ Body protection) Not normally required.

Respiratory protection No respiratory protection is required.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**9.1 Information on basic physical and chemical properties**

Appearance Solid.  
Colour Various.  
Odour Odourless.  
Odour Threshold Not applicable.  
pH Not applicable.  
Melting Point/Freezing Point No data.  
Initial boiling point and boiling range Not applicable.  
Flash point Not applicable.  
Evaporation rate Not applicable.  
Flammability (solid, gas) Not flammable.

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Upper/lower flammability or explosive limits	Explosion risk in case of fire.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Density	Not applicable.
Solubility(ies)	Insoluble in water.
Partition coefficient: n-octanol/water	Not applicable.
Auto-ignition temperature	No data.
Decomposition Temperature	No data.
Viscosity	Not applicable.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

**9.2 Other information** None.

## SECTION 10: STABILITY AND REACTIVITY

<b>10.1 Reactivity</b>	Stable under normal conditions.
<b>10.2 Chemical stability</b>	Stable under normal conditions.
<b>10.3 Possibility of hazardous reactions</b>	Stable under normal conditions.
<b>10.4 Conditions to avoid</b>	Keep away from heat and other ignition sources, direct sunlight, moist air.
<b>10.5 Incompatible materials</b>	Acids, oxidising agents, alkalis, reducing agents, potassium tert-butoxide, water, oils and solvents
<b>10.6 Hazardous decomposition products</b>	Toxic fumes, carbon monoxide, carbon dioxide. Hydrofluoric acid and hydrogen gas will be formed when electrolyte solution react with water.

## SECTION 11: TOXICOLOGICAL INFORMATION

No known hazards are associated with the use of this article.

<b>11.1 Information on toxicological effects</b>	
<b>Acute toxicity</b>	Not classified.
<b>Skin corrosion/irritation</b>	Not classified.
<b>Serious eye damage/irritation</b>	Not classified.
<b>Respiratory or skin sensitization</b>	Not classified.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Not classified.
<b>Reproductive toxicity</b>	Not classified.
<b>Specific target organ toxicity — single exposure</b>	Not classified.
<b>Specific target organ toxicity — repeated exposure</b>	Not classified.

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**Aspiration hazard** Not classified.

**11.2 Other information** None.

## SECTION 12: ECOLOGICAL INFORMATION

No environmental hazards have been reported or known.

**12.1 Toxicity** Not classified.

**12.2 Persistence and degradability** The product is not biodegradable.

**12.3 Bioaccumulative potential** No data.

**12.4 Mobility in soil** The product has low mobility in soil.

## SECTION 13: DISPOSAL

**13.1 Dispose of chemical** Dispose at suitable refuse site.

**13.2 Dispose of containers** Recycle only completely emptied packaging.

**13.2 Disposal precautions** Disposal should be in accordance with local, state or national legislation.

## SECTION 14: TRANSPORT INFORMATION

**14.1 UN number – ADR/ IMDG/ IATA** UN3480 UN3481

**14.2 UN Proper Shipping Name – ADR/ IMDG/ IATA** LITHIUM ION BATTERIES LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT or LITHIUM ION BATTERIES PACKED WITH EQUIPMENT

**14.3 Transport hazard class(es) – ADR/ IMDG/ IATA** 9 9

**14.4 Packing Group – ADR/ IMDG/ IATA** - -

**14.5 Environmental hazards – ADR/ IMDG/ IATA** Not classified as a Marine Pollutant. Not classified as a Marine Pollutant.

**14.6 Special precautions for user – ADR/ IMDG/ IATA** See Also Section: 7, 10. See Also Section: 7, 10.

**14.7 Additional information**

ADR	ADR
Classification Code: M4	Classification Code: M4
Labels: Class 9A	Labels: Class 9A
Special Provisions: 188, 230, 310, 348, 360, 376, 377, 387, 636	Special Provisions: 188, 230, 310, 348, 360, 376, 377, 387, 390, 670
Limited Quantities: 0	Limited Quantities: 0
Excepted Quantities: E0	Excepted Quantities: E0
Packing Instruction: P903, P908, P909, P910, P911, LP903, LP904, LP905, LP906	Packing Instruction: P903, P908, P909, P910, P911, LP903, LP904, LP905, LP906
Special Packing Provisions: -	Special Packing Provisions: -
Mixed Packing Provisions: -	Mixed Packing Provisions: -



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## SECTION 15: REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

<b>Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)</b>	Not listed. Lithium nickel cobalt aluminum oxides (CAS No.: 131344-56-4)
<b>Catalog of Hazardous Chemicals(2015)</b>	Aluminum (CAS No.: 7429-90-5) Diethyl carbonate (CAS No.: 105-58-8) Dimethyl carbonate (CAS No.: 616-38-6) Silicon (CAS No.: 7440-21-3)
<b>List of Toxic Chemicals Restricted to be Imported/Exported</b>	Not listed.
<b>Inventory of Prohibited Chemicals</b>	Carbon black (CAS No.: 1333-86-4)
<b>List of Hazardous Chemicals for Priority Management- SAWS</b>	Not listed.

## SECTION 16: OTHER INFORMATION

### Acronyms

MAC: Maximum Allowable Concentration

PC-TWA: Permissible concentration – Time Weighted Average

PC-STEL: Permissible concentration – Short Term Exposure Limit

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IATA: International Air Transport Association

IMDG: International Maritime Dangerous Goods

### Disclaimers

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.