

# Material Safety Data Sheet (MSDS) Flitecell

Product	Lithium Battery Pack	
Type/Model	Flitecell Explore Ti, 50.4V, 40Ah, 2016Wh	
	Flitecell Sport Ti Series 3, 50.4V, 29.4Ah, 1482Wh	
	Flitecell Sport Ti Series 2.2, 50.4V, 29.4Ah, 1482Wh	
	Flitecell Nano Ti, 50.4V, 16Ah, 806Wh	
	MN Flitecell Explore, 50.4V, 40Ah, 2016Wh	
	MN Flitecell Sport, 50.4V, 29.4Ah, 1482Wh	
	MN Flitecell Nano, 50.4V, 16Ah, 806W	
Issue Date	2024-04-02	
Validity	2024-04-02 - 2024-12-31	
Contact	Warwick Fifield	

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# Chemical And Company Identification

Product	Lithium Battery Pack	
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Usage	Used in Personal Watercraft	
Company	Fliteboard Pty Ltd	
Address	156 Jonson Street, Byron Bay, New South Wales, Australia	
Zip Code	2481	
Email	warwick.fifield@fliteboard.com	
Emergency Number	+61 2 5118 9888	

# Section 2

# Hazards Identification

#### Classification

This product, when used as intended, is not considered hazardous by the Regulation (EC) No 1272/2008 (CLP). This product is an article which is a sealed battery and as such does not require an SDS per the Regulation (EC) No 1272/2008 (CLP) unless ruptured. The hazards indicated are for a ruptured battery.

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Skin corrosion/irritation	Category 1B
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 1
Skin sensitisation	Category 2
Specific target organ toxicity (repeated exposure)	Category 1



Hazard Statemer	Hazard Statements	
H302	Harmful if swallowed	
H312	Harmful in contact with skin	
H332	Harmful if inhaled	
H318	Causes serious eye damage	
H317	May cause an allergic skin reaction	
H350	May cause cancer	
H371	May cause damage to organs	
H355	May cause respiratory irritation	



This battery product is an article which contains a chemical substance. Safety information is given for exposure to the chemical substance as a solid. Intended use of the product should not result in exposure to the chemical substance. In case of rupture: the above hazards exist.

Precautionary Statements - Prevention	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P281	Use personal protective equipment as required.
P264	Wash face, hands and any exposed skin throughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P210	Keep away from heat/sparks/open flames/hot surfaces - no smoking.
P270	Do not eat, drink or smoke while using this product.



Precautionary Statements - Response		
P301 +P330 +P308	If exposed, get medical advice/attention. For specific treatment, see supplemental first aid instructions in section 4 and below.	
Skin	If on skin: wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs or if you feel unwell, seek medical advice/attention.	
Eye	If in eyes: Rinse copiously with water for several minutes, remove contact lenses if present and easy to do, then continue rinsing. Call a POISON CENTRE or doctor/physician if you feel unwell.	
Inhalation	If inhaled, move victim to an open area and keep at rest in a position comfortable for breathing. If feeling unwell, call a POISON CENTRE or doctor/physician	
Ingestion	If swallowed: rinse mouth, do not induce vomiting. Call a POISON CENTRE or doctor/physician if you feel unwell.	

### **Precautionary Statements - Storage**

P405 Store locked up.

### Precautionary Statements - Disposal

P501 Dispose of contents/container at an approved waste disposal plant.

### Hazards not otherwise classified (HNOC)

- Not applicable.

#### Other Information

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### Interactions with other chemicals

- Consumption of alcoholic beverages may enhance toxic effect.



# **Section 3**Composition/Information

Ingredient	Molecular formula	CAS Number	Weight	
Contains Electrolyte salt and solvents			5-20%	
Lithium Hexafluorophosphate	LiPF <sub>6</sub>	21324-40-3	1-5%	
Ethylene Carbonate	C <sub>3</sub> H <sub>4</sub> O <sub>3</sub>	96-49-1	5-20%	
Propylene Carbonate	C <sub>4</sub> H <sub>6</sub> O <sub>3</sub>	108-32-7		
Diethyl Carbonate	C <sub>5</sub> H <sub>10</sub> O <sub>3</sub>	105-58-8		
Dimethyl Carbonate	C <sub>3</sub> H <sub>6</sub> O <sub>3</sub>	616-38-6		
Ethyl Methyl Carbonate	C <sub>4</sub> H <sub>8</sub> O <sub>3</sub>	623-53-0		
Polyvinylidene Fluoride	(C <sub>2</sub> H <sub>82</sub> F <sub>2)n</sub>	24937-79-9	<1%	
Copper	Cu	7440-50-8	9-18%	
Aluminium	Al	7429-90-5	17-27%	
Positive Electrode			20-50%	
Lithium Cobalt Dioxide	Li CoO <sub>2</sub>	12190-79-3	20-50%	
Manganese	Mn	7439-96-5		
Nickel	Ni	7440-02-0		
Aluminium	Al	7429-90-5		
Negative Electrode			13-18%	
Graphite	$C_{24}X_{12}$	7782-42-5	13-18%	
Graphite /Acetylene Black	С	1333-86-4		
Steel, Nickel & inert components	-	-	Balance	

# **Section 4**First Aid Measures

Eye Exposure	In case of contact with eyes, flush with large amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.
Skin Exposure	If the internal battery materials of an opened battery cell come into contact with skin, immediately flush with plenty of water or soap.
Inhalation Exposure	If vomiting occurs from inhalation, seek immediate medical attention.
Ingestion Exposure	If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.



# Fire-Fighting Measures

Danger Characteristic	Exposure to excessive heat can cause venting of the electrolyte. Battery may burst and release hazardous decomposition products when exposed to fire.
Hazardous Combustion Products	Corrosive and toxic gas may be emitted during a fire.
Fire-Fighting Method	Emergency responders must wear protective clothing and defend against the fire from the upwind side.
	Move the battery product to an open space as soon as possible.
	Spray water on the battery product that is on fire to keep it cool until it is extinguished.
Fire-Fighting Media	Plenty of water.

## Section 6

### Accidental Release Measures

#### Emergency Treatment

If any of the battery material is released, remove personnel from area until the batteries cool down and fumes dissipate.

Provide maximum ventilation to clear out hazardous gases and avoid skin and eye contact or inhalation of vapors.

Remove spilled liquid materials.

## Section 7

# Handling and Storage

### Handling

- 1 Do not allow battery terminals to contact each other, or make contact with any other metals.
- Do not put the cell or battery into a fire or heat it. Do not solder the cell directly. Do not use or leave the cell or battery in a place near fire or heat sources.
- 3 Do not expose the battery to excessive physical shock or vibration.
- <sup>4</sup> Do not immerse battery in water.



Handling	
5	Short-circuiting must be avoided. A short circuit will reduce the life of the battery and can lead to ignition of surrounding materials. Physical contact with a short-circuited battery can cause skin burn.
6	The batteries must not be opened, destroyed or incinerated, since they may leak or rupture and release to the environment the ingredients that they contain in the hermetically sealed container.
7	Do not allow children near the battery unsupervised.
8	Do not connect the battery directly to an electric outlet or cigarette socket in a car.
9	Be sure to use the specified charger for the battery, and follow the charging instructions attentively.
10	Do not use a visibly damaged or deformed battery.

Storage	
1	Store battery in a cool, dry and well-ventilated area (temperature: -10 $\sim$ +30°C, humidity: 45 $\sim$ 85%). Do not allow exposure to direct sunlight for long periods. Keep away from fire and heating sources.
2	Ensure the storage area is equipped with the fire fighting media as per section 5.
3	Groups of batteries (>2) should be stored in original packaging or equivalent, according to dangerous goods handling procedures in a non-combustible, well ventilated, sprinkler-protected structure with sufficient clearance between walls and battery carton stacks.

# **Section 8**Exposure Controls & Personal Protection

Engineering Control	Keep away from heat and open flame. Store in a cool, dry place.
Respiratory Protection	Not necessary under normal conditions of use. Wear the appropriate breathing apparatus suitable for emergency rescue or evacuation situations.
Eye Protection	Not necessary under normal conditions of use. Wear protective glasses if handling a leaking or ruptured battery.
Skin & Body Protection	Not necessary under normal conditions of use. Wear fire proof & gas proof PPE clothing in the case of handling a leaking or ruptured battery.
Hand Protection	Not necessary under normal conditions of use. Wear chemical resistant rubber gloves.



# Physical & Chemical Properties

Appearance	Silver & Black
Physical State	Solid
Form	Prismatic
Odour	Odourless
Solubility	Insoluble in water

# Section 10

# Stability & Reactivity

Stability	Stable under normal temperature and pressure.	
Reactivity	Explosives, inflammables, strong oxidants and corrosives.	
Conditions to Avoid	Fire source, heat source, disassembly, external short circuit, physical damage, deformation, high temperature above 100°C, direct sunlight and high humidity, immersion in water or overcharging.	
Hazardous Polymerization	Will not occur.	
Hazardous Decomposition Products	Metal oxides, carboxyl compound such as CO, CO <sub>2</sub> , etc.	

# Section 11

# Toxicological Information

Acute Toxicity	No information is available.
Sub-acute and Chronic Toxicity	No information is available.
Irritation Data	The internal battery materials may cause irritation to eyes and skin.
Sensitization	The contents of the battery may cause sensitization in some people.
Mutagenicity	No information is available.



Carcinogenicity	Cobalt and Cobalt compounds are considered to be possible human carcinogen(s).
Others	Since the materials in this battery are sealed in the case, the potential for exposure to the components of the battery is negligible, when the battery is used as directed. However technical or electrical abuse of the battery may result in the release of battery contents.

# **Ecological Information**

Eco-toxicity	No information is available.
Biodegradable	No information is available.
Mobility in soil	No information is available.
Bio concentration or Biological Accumulation	No information is available.
Other Harmful Effects	Don't dispose of the battery irresponsibly, may cause water and/or soil pollution.

# Section 13

# Disposal Considerations

#### **Appropriate Disposal Methods**

The battery should be completely discharged prior to disposal in order to prevent short circuit.

The battery contains recyclable materials, and it is recommended to be recycled.

Refer to national or local regulations before disposal.

Disposal of the battery should be performed by permitted, professional disposal firms knowledgeable in national or local regulations of hazardous waste treatment and hazardous waste transportation.



# Transport Information

#### **UN 3480 Lithium Ion Batteries**

	Air	Sea	Road	Rail
Hazard Class	Class 9	Class 9, according to sp230 & sp348	Class 9, according to sp230 & sp348	Class 9
Packing group	II	II	II	II
Packing instruction	965 section IA	903	903	903
EmS No.	-	F-A, S-I	-	-

### UN 3481 Lithium Ion Batteries packed with equipment

	Air	Sea	Road	Rail
Hazard Class	Class 9	Class 9, according to sp230 & sp348	Class 9, according to sp230 & sp348	Class 9
Packing group	II	II	II	II
Packing instruction	966 section I	903	903	903
EmS No.	-	F-A, S-I	-	-

### UN 3481 Lithium Ion Batteries contained in equipment

	Air	Sea	Road	Rail
Hazard Class	Class 9	Class 9, according to sp230 & sp348	Class 9, according to sp230 & sp348	Class 9
Packing instruction	967 section I	903	903	903
EmS No.	-	F-A, S-I	-	-

Air	Air transportation, according to IATA-DGR 65th Edition (Effective 1 January-31 December 2024)
Sea	Sea transportation, according to IMO IMDG Code 2022 (Amend 41-2022)
Road	Road transportation, according to UN ADR-2023
Rail	Rail transportation, according to UN RID-2023



# Regulatory Information

Dangerous Goods Regulation (DGR)

Recommendations on the Transport of Dangerous Goods Model Regulations

International Maritime Dangerous Goods (IMDG)

Occupational Safety and Health Act (OSHA)

Toxic Substances Control Act (TSCA)

Code of Federal Regulations (CFR)

Technical Instructions for the Safe Transport of Dangerous Goods

California Proposition 65

Superfund Amendments and Reauthorization Act Title III (302/311/312/313) (SARA)

Globally Harmonized System of Classification and Labeling of Chemicals(GHS)

In accordance with all Federal, State and local laws.

### Section 16

# Additional Information

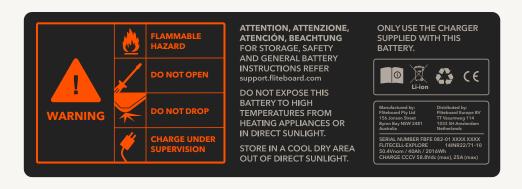
SDS Standards	GB/T 16483-2008 Safety data sheet for chemical products Content and order of sections		
	ISO 11014:2009(E) Safety data sheet for chemical products - Content and order of sections		
Assessment Report Date	2024-04-02		
Assessment Laboratory	Guangzhou MCM Certification & Testing Co., Ltd. No.13, Zhong San Section, ShiGuang Road, Panyu District, Guangzhou City, Guangdong Province, China.		
Other Information	The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. We make 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 conduct their own investigation to determine the suitability of the information for their particular purposes. In no way shall Flite be liable for any claims, losses, or damage of any third party or for lost profits or any special, indirect, consequential or exemplary damages arising from using the above information.		



### Flitecell Explore, 50.4V, 40Ah, 2016Wh









### Flitecell Sport, 50.4V, 29.4Ah, 1482Wh

### Series 3





### Series 2.2







ATTENTION, ATTENZIONE, ATENCIÓN, BEACHTUNG FOR STORAGE, SAFETY AND GENERAL BATTERY INSTRUCTIONS REFER support.filteboard.com DO NOT EXPOSE THIS BATTERY TO HIGH

DO NOT EXPOSE THIS BATTERY TO HIGH TEMPERATURES FROM HEATING APPLIANCES OR IN DIRECT SUNLIGHT.

STORE IN A COOL DRY AREA OUT OF DIRECT SUNLIGHT.

ONLY USE THE CHARGER SUPPLIED WITH THIS BATTERY.



Fliteboard Pty Ltd 156 Jonson Street Byron Bay, 2481 NSW Australia +61 2 5118 9888 Fliteboard Europe B.V TT Vasumweg 114 1033SH Amsterdam The Netherlands +31 648 013 732 Fliteboard USA LLC 3 Main Street Suite C2, Nyack New York 10960 United States +1 833 359 0940



### Flitecell Nano, 50.4V, 16Ah, 806Wh







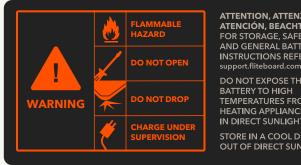
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### MN Flitecell Explore, 50.4V, 40Ah, 2016Wh







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Manufactured by:
Fileboard Fry Ltd
15ts Jones Street
By High Stow 3851
15ts Jones Street
By High Stow 3851
15ts Jones Street
By High Stow 3851
15ts Jones Street
BY SERIAL NUMBER FRIME 001554 XXXX XXXX
MN FUTECEL EXPLORE 14IMR2277-10
SOLVING MY 2016WA
CHARGE CCCV 58 8046 (max) 254 (max)

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### MN Flitecell Sport, 50.4V, 29.4Ah, 1482Wh

### Series 3







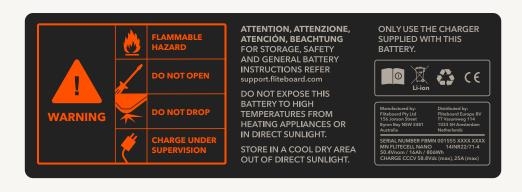
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