# SAFETY DATA SHEET

*This Safety Data Sheet Complies with directives from the United States Occupational Safety and Health Administration (OSHA), Canadian Controlled Product Regulations (WHMIS), the European Union Commission Regulation (EC) 1907/2006 & (EC) 2015/830, the Australian National Occupational Health and Safety Commission (NOHSC), the Taiwan Bureau of Standards, the Japan Ministry of Economy, the Inspection and Quarantine of the People's Republic of China (GB/T 16483-2008), the Brazil Standard (ABNT NRB 14725-3) and Malaysian Department of Environment.*

## SECTION I – PRODUCT AND COMPANY IDENTIFICATION

**1.1 Product Identification**:
Secondary Smart Lithium-Ion Battery Packs:

| Model | Ratings | Model | Ratings | Model | Ratings |
|---|---|---|---|---|---|
| L02Dxxxx | 7.2V,<24Wh,<10A | ND2057xxxx | 7.2V,<49Wh,<10A | Ni2040xxxx | 10.8V,<94Wh,<10A |
| L03Dxxxx | 10.8V,<37Wh,<10A | ND3057xxxx | 7.2V,<49Wh,<10A | NL2020xxxx | 10.8V,<97Wh,<10A |
| L04Dxxxx | 14.4V,<49Wh,<10A | ND2034xxxx | 14.4V,<49Wh,<10A | NL2024xxxx | 14.4V,<97Wh,<10A |
| L06Dxxxx | 10.8V,<73Wh,<10A | ND3034xxxx | 14.4V,<49Wh,<10A | NL2044xxxx | 14.4V,<97Wh,<10A |
| L08Cxxxx | 14.4V,<98Wh,<10A | ND2054xxxx | 14.4V,<49Wh,<10A | NL2050xxxx | 10.8V,<97Wh,<10A |
| L08Dxxxx | 14.4V,<98Wh,<10A | ND3054xxxx | 14.4V,<49Wh,<10A | NL2054xxxx | 14.4V,<97Wh,<10A |
| L12Dxxxx | 14.4V,<97Wh,<10A | ND4054xxxx | 14.4V,<72Wh, <8A | PB3037xxxx | 7.2V,<21Wh,<8A |
| L16Dxxxx | 14.4V,<98Wh,<10A | NE4068xxxx | 18V,<90Wh, <8A | PD3074xxxx | 14.4V,<72Wh,<12A |
| NB2037xxxx | 7.2V,<24Wh <10A | NF2047xxxx | 7.2V,<73Wh,<10A | PD3077xxxx | 7.2V,<72Wh,<20A |
| NB3037xxxx | 7.2V,<24Wh, <10A | NF2030xxxx | 10.8V,<73Wh,<10A | PG3665xxxx | 25.2V,<73Wh,<20A |
| NB4037xxxx | 7.2V,<36Wh, <8A | NF2040xxxx | 10.8V,<73Wh,<10A | PH2059xxxx | 28.8V,<98Wh,<10A |
| NC2040xxxx | 10.8V,<37Wh,<10A | NF3040xxxx | 10.8V,<73Wh,<10A | PH2054xxxx | 14.4V,<98Wh,<20A |
| NC3040xxxx | 10.8V,<37Wh,<10A | NH2054xxxx | 14.4V,<98Wh,<10A | PH3054xxxx | 14.4V,<58Wh,<20A |
| NC2560xxxx | 10.8V,<22Wh,<2A | NH2057xxxx | 7.2V,<98Wh,<12A | PH3059xxxx | 28.8V,<98Wh,<20A |
| NC4040xxxx | 10.8V,4Wh, <8A | NH2034xxxx | 14.4V,<98Wh,<10A | RH2024xxxx | 14.4V,<98Wh,<10A |
| ND2053xxxx | 3.6V,<49Wh,<10A | NH3054xxxx | 14.4V,<98Wh,<10A | RH2044xxxx | 14.4V,<98Wh,<10A |
| ND2017xxxx | 7.2V,<49Wh,<3A | Ni2020xxxx | 10.8V,<94Wh,<10A | | |
| ND2037xxxx | 7.2V,<49Wh,<10A | Ni3020xxxx | 10.8V,<94Wh,<10A | | |

Where "xxxx" indicates all different custom & standard model variants identified by alphanumeric suffixes.

**1.2 Company Identification**:
Company Name: Inspired Energy, LLC
Address: 25440 NW 8th Place; Newberry, FL 32669
Telephone Number: +1-352-472-4855
Fax Number: +1-352-472-4859
Emergency Contact Number: +1 813-248-0585 or +1 888-533-7762
Report Number: IESDSV7

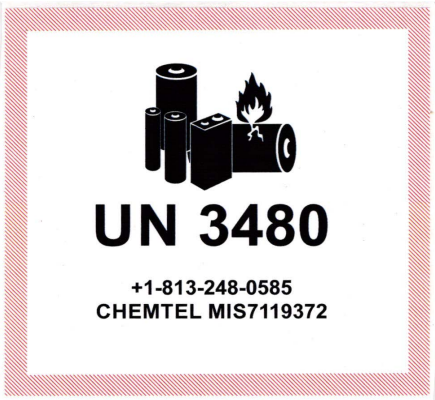
## SECTION II – HAZARD IDENTIFICATION

**2.1 Classification of Products:**
Secondary battery packs are enclosed in UL-94, V-0 enclosures designed to withstand temperatures and pressures encountered during normal use. The hazardous component in battery packs is the lithium-ion cell. Under normal use the battery cells present no physical danger of ignition or explosion and chemical danger of hazardous materials leakage. Battery cells are designed to vent gas to prevent explosion, if exposed to a fire, added mechanical shocks, electrically abused or physically damaged. This leaked gas could contain material classified as hazardous.

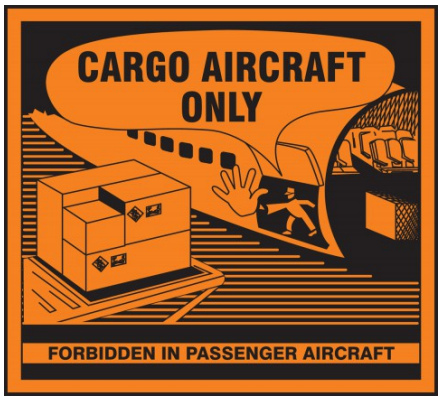
**2.2 Label and Markings**:

**2.2.1 Example of Battery Pack Markings**:


**2.2.2 Example of Packaging Labels:**








**2.3 Effect(s) of Hazard Exposure:**
**Human Health Effects if Exposed to Cell Venting**:
**Skin Contact:** The steam or liquid of the cell electrolyte can have adverse reactions to the skin. If cell electrolyte contacts skin it can cause severe irritation or chemical burns.
**Eye Contact:** The steam or liquid of the cell electrolyte can have adverse reactions to the eyes. If cell electrolyte contacts the eyes it can cause severe irritation or chemical burns.
**Inhalation:** The steam or liquid of the cell electrolyte can have adverse reactions if inhaled. If cell electrolyte is inhaled it may cause severe respiratory irritation.
**Ingested:** Swallowing or ingesting the contents of an open cell can cause serious chemical burns to the mouth, esophagus and gastrointestinal tract.
**Medical Conditions Aggravated by Exposure**: Not Available
**Interactions with Other Chemicals:** Immersion in high conductivity liquids may cause corrosion and breaching of the cell or battery enclosure. If vented cell electrolyte contacts water it will generate detrimental hydrogen fluoride.
**Environmental Effects:** Not Available

## SECTION III – COMPOSITION / INFORMATION OF INGREDIENTS

**3.1 Classification of Hazardous Ingredients by Geographic Markets:**
**USA:** This battery pack is an article pursuant to 29 CFR 1910.1200. The information contained in this Safety Data Sheet contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
**Canada:** This is not a controlled produced under WHMIS. The products listed in this Safety Data Sheet are defined as "Manufactured Articles" and is not subject to the regulations of the Hazardous Products Act.
**EU:** This product is an article according to the REACH Regulation (1907/2006).
**Australia:** The products listed in this SDS are constructed using Lithium-Ion cell or battery and is classified as an article and is not hazardous when used according to the recommendations of the manufacturer. The hazard is associated with the contents of the cell. If the cell or battery is compromised and starts to leak, based upon the battery ingredients the contents are classified as hazardous according to the criteria of the National Occupational Health and Safety Commission stated by SafeWork Australia.
**Taiwan:** This product is not classified as a dangerous good.
**Japan:** This product is not classified as a dangerous good.
**China:** This product is not classified as a dangerous good.
**Brazil:** This product is an article according to ABNT NRB 14725-2:2009

| Cell Component | Chemical Name | Mass Range (Weight %)* |
|---|---|---|
| Electrolyte Salt | Lithium Hexafluorophosphate | 1~5 |
| Electrolyte Solvents | Ethylene Carbonate, Propylene Carbonate, Diethyl Carbonate, Dimethyl Carbonate, Ethyl Methyl Carbonate | 5~20 |
| PVDF | Polyvinylidenfluoride | <1 |
| Base | Copper | 1~15 |
| Cathode | Lithium Cobaltite, Manganese, Nickel, Aluminum | 20~50 |
| Anode | Graphite, Carbon Black | 13~18 |

*(* Quantities may vary depending on battery model)*

## SECTION IV – FIRST-AID MEASURES

**4.1 Description of First Aid Measures:**
The hazardous component in secondary battery packs are in the internally sealed cells. **The following measures are only applicable if the cells have been abused/damaged causing exposure of hazardous materials noted under section three.**
Ingestion: Have the victim rinse mouth thoroughly. DO NOT INDUCE VOMITING. Contact your local poison control center. Immediately seek medical attention.
Inhalation: Remove victim from exposure to chemicals and into the fresh air. Immediately seek medical attention.
Skin Contact: Immediately flush with water. Immediately seek medical attention.
Eye Contact: If eye contact with the contents of a vented cell immediately flush eyes with water. Immediately seek medical attention.
Protection for First Aiders: Do not expose yourself to corrosive vapor-contaminated areas without a respirator.
First Aid Facilities: Eye wash bottle, fountain and safety showers (running water).

**4.2 Most Important Symptoms & Effects Caused by Exposure:**
Ingestion of cell contents may cause gastrointestinal tract irritation or even vomiting. Inhalation of vented cell vapors may lead to severe irritation of the mouth and upper respiratory tract causing a burning/pain sensation or inflammation in the nose and throat. Inhalation could also cause coughing or difficulty breathing. Eye contact may cause severe eye irritation, eye burning/pain and even possible irreversible damage. Skin contact may lead to irritation and possible chemical burns.

**4.3 Indication of any immediate medical attention and special treatment needed**
**ADVICE TO DOCTOR:** Treat symptomatically if the person comes into contact with the corrosive electrolyte liquid contents of a damaged battery.

## SECTION V – FIRE FIGHTING MEASURES

**5.1 Extinguishing Media:**
Suitable Extinguishing Media: Water, Fire Extinguishing Powder, Nitrogen Gas, Carbon Dioxide, or Foam.
Unsuitable Extinguishing Media: Oxidizing agents, reducing agents, acids or alkalis.
Explosion Data: Closed containers may explode when exposed to temperatures above 120°C (248°F).
Hazchem Code: 4W (Australia, New Zealand and Malaysia)
Sensitivity to Mechanical Impact: Extreme mechanical abuse could cause venting of the cells.
Sensitivity to Static Discharge: If electrolyte is exposed to electrostatic discharge it could ignite.
TDG/DOT ERG Code:147

**5.2 Special Hazards Arising from the Chemical:**
If a cell vents and exposes lithium hexafluorophosphate mixed with water vapor, this could create a poisonous gas of hydrogen-fluoride gas. Degradation of the cell by heat may produce hazardous fumes of lithium, cobalt-manganese, hydrofluoric acid, hydrogen and oxides of carbon, aluminum, lithium, copper and cobalt.

**5.3 Advice for Fire Fighting:**
When battery cells combust, they tend to ignite other cells in the adjacent area. Prevent this by flooding the area with Carbon Dioxide, Foam, Nitrogen Gas or Fire Extinguishing Powder. Although use of water will extinguish flame it may create hydrogen-fluoride gas. Burning component cells or batteries will burn themselves out. Virtually all fires involving Lithium Ion cells and batters can be controlled with water. When water is used however, hydrogen gas may be evolved which can form an explosive mixture with air. LITH-X (powdered graphite) or copper powder fire extinguishers, sand, dry ground dolomite or soda ash may also be used. These materials act as soothing agent.

**5.4 Special Protective Equipment for Fire Fighters:**
In the case of a fire and release of hydrogen fluoride, it is critical to protect the skin from any contact. Fire fighters should wear a self-contained breathing apparatus. Burning lithium-ion cells and batteries can produce toxic fumes including hydrogen fluoride (HF), oxides or carbon, aluminum, lithium, copper and cobalt. Volatile phosphorous penta fluoride may form at temperatures above 110°C (230°F). Wear adequate personal protective equipment:
Respiratory Protection: Self-contained Breathing Apparatus
Hand Protection: Protective Gloves
Eye Protection: Full Face Breathing Apparatus or Googles
Body Protection: Protective Uniform

## SECTION VI – ACCIDENTAL RELEASE MEASURES

If battery packs internal cells become damaged, they could possibly leak minuscule amounts of contaminates. The following procedures list precautions and steps to cleaning these contaminates.

**6.1 Personal Precautions:**
Quarantine contaminated area at 75 feet (25 meters) radius from the center of contamination. Don protective equipment and clothing listed in Section 8.2.

**6.2 Environmental Precautions:**
Cover spilled materials with absorbent non-reactive material (ie. vermiculite). Keep contaminated non-reactive material away from soil, sewers or waterways. Inform appropriate authorities if contamination occurs.

**6.3 Methods for Clean Up:**
Quarantine contaminated area at 75 feet (25 meters) radius from the center of contamination. Don protective equipment and clothing listed in Section 8. Do not touch Spilled material. Use only non-sparking tools and equipment. Do not expose spilled material to moisture. Seal all possible locations where contaminates might migrate into the environment. Clean up solids and place them into a waste container safe for disposing of contaminated trash. Clean up spilled liquids with vermiculite and place them into the same container. Appropriately transport contaminated material to a waste facility capable of handling contaminated materials.

**6.4 Precautions to Prevent Secondary Hazard:**
Avoid the release of collected materials. Do not bring the collected materials near open flame. Seal contaminates into a waste container safe for disposing of contaminated trash. Transport contaminates to an appropriate waste facility.

## SECTION VII – HANDLING AND STORAGE

**7.1 Precautions for Safe Handling:**
Avoid shorting the battery. Do not immerse in water. Do not disassemble or deform the battery. Do not expose to, or dispose of the battery in fire. Avoid excessive physical shock or vibration. Keep out of the reach of children. Battery must be charged in an approved charger. Never use a modified or damaged charger. Use for specified product applications only. Store in a cool, dry and well-ventilated area. Never use a battery that has suffered abuse. Refer to data sheet for safe operating instructions.

**7.2 Conditions for Safe Storage:**
Store battery packs in a cool (25°C+/-5°C), Dry (<85% Humidity) well ventilated area. Keep battery packs in packaging material to prevent exposure to elements and conductive material.

Do not store battery packs near heat, high humidity, open flame, sunlight, water, seawater, strong acids, strong oxidizers, strong reducing agents, strong alkalis or metal wire.

**7.3 Specific End Uses:**
Rechargeable Smart Battery Packs are used across a wide market scope as a DC power supply for portable electronic devices.

## SECTION VIII – EXPOSURE CONTROLS, PERSONAL PROTECTION

*Under routine operation none of these safety procedures or equipment are required. Take the following safety measures only if the internal cells are comprised and leak or vent.*

**8.1 Exposure Control Measures:**
Exposure Limit Values- ACGIH does not mention electrolyte as a controlled method. Not applicable.
Biological Monitoring-Not Applicable.
Control Banding- Not Applicable.
Recommended Monitoring Procedures- Follow standard monitoring procedures.
Derived no-effect level- Not Applicable.
Derived minimal effect level- Not Applicable.
Predicted no-effect concentrations- Not Applicable.

**8.2 Personal Protective Equipment:**
Engineering Controls- Special ventilation is only required if cell venting occurs.
Eye and Face Protection- Wear chemical resistant safety googles or face shield.
Hand Protection- Wear chemical resistant gloves.
Skin Protection- Wear long sleeved clothing. Solid clothing should be washed with detergent.
Respiratory Protection- Wear an approved half face inorganic vapor, gas, acid and particulate respirator.
Thermal Protection- Not Applicable.
Hygiene Measures- Do not eat, drink or smoke in work areas.
Environmental Exposure Controls- Do not release into the environment.

## SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

**Physical State**- Sealed Solid
**Appearance**- Small Battery Pack
**pH**- Not Applicable
**Relative Density**- Not Applicable
**Boiling Point**- Not Applicable
**Melting Point**- Not Applicable
**Viscosity**- Not Applicable
**Oxidizing Properties**- Not Applicable
**Flash Point**- Not Applicable
**Water Partition**- Not Applicable
**Vapor Pressure (mm Hg @20°C)**- Not Applicable
**Vapor Density**- Not Applicable
**Solubility in Water**- Insoluble
**Water Distribution Coefficient**- Not Applicable
**Odor Type**- Odorless
**Odor Threshold**- Not Applicable
**Evaporation Rate**- Not Applicable
**Auto Ignition Temperature**- Not Applicable
**Flammability Limits**- Not Applicable
**Decomposition Temperature**- 90°C

## SECTION X – STABILITY AND REACTIVITY

**10.1 Stability and Reactivity:**
**Stability-** The battery packs manufactured by Inspired Energy are completely stable under normal use and in normal storage conditions.
**Reactivity-** The internal cells within the battery packs may become unstable due to abusive conditions.
Conditions to Avoid- Avoid shorting the battery. Do not immerse in water. Do not disassemble or deform the battery. Do not expose to, or dispose of the battery in fire. Avoid excessive physical shock or vibration. Keep out of the reach of children. Battery must be charged in approved charger. Never use a modified or damaged charger. For specified product use only. Store in a cool, dry and well-ventilated area. Never use a battery that has suffered abuse. Refer to data sheet for safe operating instructions.
**Incompatible Materials-** Do not immerse in water or any other high corrosive conductive liquid.
**Hazardous, Decomposition Products-** Internal cells may decompose to hydrogen fluoride, phosphorous oxides, sulfur oxides, sulfuric acid, lithium hydroxide, carbon monoxide and carbon dioxide.

## SECTION XI – TOXICOLOGICAL INFORMATION

**11.1 Information on Toxicological Effects:**
The battery packs manufactured by Inspired Energy present no toxicological effects under normal use. The hazardous components of the battery packs are within the internal cell. Within recommended conditions the electrode materials and liquid electrolytes do not react when the cell remains sealed. Exposure to these hazardous components is only possible if the battery leaks or vents. The following toxicology data is in respect to a person coming into contact with exposed electrolyte of the cell.

**11.2 Acute Toxicity:**
Swallowed- The electrolyte contained within the cells of the battery pack is a corrosive material. Ingestion of this electrolyte would be harmful. Swallowing may result in nausea, vomiting, diarrhea, abdominal pain and chemical burns in the gastrointestinal tract. During normal usage ingestion of a sealed battery pack is physically impossible.

**11.3 Skin Corrosion or Irritation:**
The electrolyte contained within the cells of the battery pack is a corrosive liquid. If this corrosive liquid make contact to your skin they could cause irritation or even severe chemical burns. A sealed battery presents no danger to a person's hand or skin.

**11.4 Serious Eye Damage or Irritation:**
The electrolyte contained within the cells of the battery pack is a corrosive liquid. If this electrolytes makes contact with the eye it could cause irritation or even irreversible damage to the eye. A sealed battery presents no danger to eyes.

**11.5 Respiratory or Skin Sensitization:**
OECD Test 406 as performed by the cell manufacture, presented no evidence that the electrolyte contained within the cell of battery pack cause no respiratory or skin sensitizers.

**11.6 Germ Cell Mutagenicity:**
OECD Test 471, 475, 476, 478 and 479 Test 406 as performed by the cell manufacture, presented no evidence that the electrolyte contained within the cell of a battery pack cause no mutagenic effect.

**11.7 Carcinogenicity:**
The electrolyte contained within the cell of a battery pack is not considered by the cell manufacture to be a carcinogen.

**11.8 Reproductive Toxicity:**
OECD Test 414 and 421 Test 406 as performed by the cell manufacture, presented no evidence that the Electrolyte contained within the cell of a battery pack cause an hazard to the human reproductive system.

**11.9 Specific Target Organ Toxicity (STOT) - Single Exposure:**

Inhalation of vapors from a leaking cell within a battery pack will cause irritation or even severe pain to the mouth and respiratory tract. Sealed battery packs present no organ toxicity.

**11.10 Specific Target Organ Toxicity (STOT) - Repeated Exposure:**
OECD Tests 410 and 412 presented that prolonged exposure to a battery pack cells causes no organ damage.

**11.11 Aspiration Hazards:**
The electrolyte contained within the cell of the battery pack presents no aspiration concern. Although if the electrolyte is swallowed vomiting could occur and cause aspiration into the lungs.

## SECTION XII – ECOLOGICAL INFROMATION

**12.1 Ecotoxicity:** A sealed battery pack does not pose any ecotoxicity hazard. The internal cells under normal use and conditions pose no ecotoxicity hazard. In the rare case the cells seal is broken or damaged the cell could leak electrolyte. If this electrolyte reacts with water it could potentially cause damage to flora and fauna. Follow the steps under Section 13 to insure cells are disposed of properly.

**12.2 Persistence and Degradability:** No data available.

**12.3 Bio Accumulative Potential:** Not applicable.

**12.4 Mobility in Soil:** No data available.

**12.5 Results of PBT and vPvB Assessment:** Not applicable.

## SECTION XIII – DISPOSAL CONSIDERATIONS

**13.1 Waste Treatment Methods:** Recycling of Inspired Energy's Smart Battery Packs is strongly encouraged. Every battery has instructions for contacting the Rechargeable Battery Recycling Corp (RBRC) to ensure the appropriate recycling method within the USA. Every battery has the appropriate symbols to direct appropriate disposal in Europe. The battery packs internal cell's contents should not be released into the environment, do not dump into any sewers, on the ground or into any body of water. Do not dispose of battery packs in fire. Used battery packs should be stored in their original packaging. Ensure packs are stored in a manner to prevent short circuit of the cells. Battery pack should be fully discharged before recycling. Do break battery pack open before disposal.

**13.2 Classification of Waste to comply with Waste Regulations:**
**USA:** Expended batteries are not considered hazardous waste. Cells and batteries involved in a fire may be considered to be hazardous waste. Dispose of in accordance with local, state and federal laws and regulations. Consult universal/hazardous waste regulations for further information regarding disposal of spent batteries. If the internal cells are leaking/broken open, consult hazardous waste regulations under US Environmental Protection Agency's Resource Conservation and Recovery Act (RCRA). Also, consult state and local regulations for further disposal requirements.


Inspired Energy is a committed partner in Call2recycle's Rechargeable Battery Recycling Corporation (RBRC) program. Promoting the recycling of Li-Ion battery packs by providing a toll-free telephone number to call and receive information to the nearest local recycling facility.

**Canada:** Expended battery packs are not considered hazardous waste. Cells and batteries involved in a fire may be considered to be hazardous waste. Dispose of in accordance with local, provincial and federal laws and regulations. Consult the Canadian Environmental Protection Act for additional details.
**EU:** Expended battery pack waste must be disposed of in accordance with relevant EC Directives and national, regional and local environmental control regulations. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used. EU Waste Code: 16 06 05 – other batteries and accumulators.
**Australia:** Expended battery packs must be taken for recycling or disposal at an appropriate collection depot by suitably licensed contractors in accordance with government regulations.
**Taiwan:** Expended battery packs are not considered hazardous waste. Cells and batteries should be recycled at an appropriate collection site in accordance with government regulations.

**Japan:** Recycling of expended lithium-ion battery packs is regulated by the Wastes Disposal and Public Cleaning Law and the Law for Promotion of Effective Utilization.
**Brazil:** Expended battery packs should be recycled in accordance to the Natation Solid Waste Policy (PNRS) or CONAMA in compliance with the directives and regulations of the National System of Environmental (SISNAMA).
**Malaysia:** Lithium-ion cells and batteries are considered scheduled wastes and must be sent to a proper collection treatment, recycling and Disposal center; **Scheduled Waste Code SW103**

**13.3 Classification of Waste to comply with Transport Regulations:** Expended Lithium-Ion Battery packs are not considered hazardous waste. Lithium-ion battery packs that have been involved in a fire maybe considered hazardous waste and should be marked and classified as such.

**13.4 Classification of Waste Packaging Material:** Under normal use packaging is not consider hazardous and should be disposed of in accordance with local recycling regulations. Packaging that has been exposed to a damaged leaking cells should be considered hazardous waste and disposed of in accordance to local rules and regulations.

## SECTION XIV – TRANSPORT INFORMATION

**14.1 UN Number:** 3480 or 3481
**UN Testing:** UN *Manual of Tests and Criteria*, Part III subsection 38.3 **ST/SG/AC.10/C/3/2010** *5th Edition*: All battery assemblies noted in Section 1.1 have been tested to meet the referenced standard.

**14.2 UN Proper Shipping Name:** 3480-Lithium Ion Batteries. 3481-Lithium Ion Batteries Contained in Equipment or Lithium Ion Batteries Packed with Equipment

**14.3 Transport Hazard Classes:**
**Class:** 9
**Subsidiary Risk:** None
**Labels:** Lithium Handling Label, Class 9 Lithium Label, Cargo Aircraft Only Label
**Hazard No. (ADR):** 9
**Tunnel Restriction Code:** E

**14.4 Packing Group:** None
**14.5 Environmental Hazards:** None

**14.6 Special Precautions for User:** Read Safety Data Sheet and Specification Data sheet before use. Australia, New Zealand and Singapore follow Hazchem Code: 4W. TDG/DOT ERG Code: 147. ICAO/IATA ERG Code: 12FZ.

**14.7 Transport in bulk IBC Code:** No applicable code.

**14.8 Modal Information:**

| | |
|---|---|
| **Land (ADR):** | 3480 – 188, 230, 310, 348, 376, 377 and 636 (Special packaging instruction P903 applies).<br>3481 – 188, 230, 348, 360, 376, 377 and 636 (Special packaging instruction P903 applies). |
| **Land (RID):** | 3480 – 188, 230, 310, 348, 360, 376, 377 and 636 (Special packaging instruction P903 applies).<br>3481 – 188, 230, 348, 360, 376, 377 and 636 (Special packaging instruction P903 applies). |
| **Land (ADN)** | 3480 – 188, 230, 310, 348, 376, 377 and 636 (Special packaging instruction P903 applies).<br>3481 – 188, 230, 348, 360, 376, 377 AND 636 (Special packaging instruction P903 applies). |
| **Sea (IMDG):** | 188, 230, 310, 348, 376, 377, 384, 387 and 957 (Special packaging instruction P903, P908, P909, P910, P911, LP903, LP904, LP905 and LP906 applies).<br>EmS: F-A, S-I; Stowage Category A, SW19 |
| **Air (IATA)** | PI965: Lithium Ion Batteries Alone: Special Provisions A88, A99, A154, A164, A183, A201, A206, A213, A331, A334, & A802; ERG Code: 12FZ<br>PI966: Lithium Ion Batteries packed with Equipment: Special Provisions A88, A99, A154, A164, A181, A185, A206 & A213; ERG Code: 12FZ<br>PI967: Lithium Ion Batteries packed in Equipment: Special Provisions A48, A88, A99, A154, A164, A181, A185, A206 & A213: ERG Code: 12FZ |

## SECTION XV – REGULATORY INFORMATION

**15.1 Safety, Health and Environmental Regulations/ Legislation:**

**United States Federal and State Regulations: TSCA Status:** All ingredients in these products are listed on the TSCA inventory. **OSHA:** These products do not meet criteria as per Part 1910.1200, manufactured article. **SARA EPA Title III:** None. **Sec. 302/304:** None. **Sec. 311/312:** None. **Sec. 313:** Supplier Notification: The Product contains a toxic chemical or chemicals subject to the reporting requirements of section 313 of (Title) III of superfund amendments and reauthorization act of 1986 and 40 CFR Part 372. Supplier notification requirement does not apply to batteries that are considered consumer products.

| Chemical | CAS | % by weight |
|---|---|---|
| Aluminum | 7429-90-5 | 17-27 |
| Copper | 7440-50-8 | 9-18 |
| Graphite | 7782-42-5 | 13-18 |
| Lithium Cobaltite | 12190-79-3 | 20-50 |
| Lithium-Hexafluorophosphate | 21324-40-3 | 1=5 |

**CERCLA RQ:** None. **US EPA Waste Code:** D003(reactivity)-Damaged and leaking cell or battery only. **State of California:** Rechargeable Battery Recycling Act- Division 30, Part 3, Chapter 8.4 of the public resource code. Consumers must recycle all single use batteries or take them to a household hazardous waste disposal facility, a universal waste hander or an authorized recycling facility. This product can expose you to Nickel, a chemical known in the state of California to cause cancer and birth defects or other reproductive harm for more information go to www.p65warnings.ca.gov/product. **State of Minnesota:** Rechargeable Battery and products law – Rechargeable batteries and products with non-removeable batteries cannot be disposed as mixed municipal waste. **State of New York:** Rechargeable Battery law – It is illegal to dispose of rechargeable batteries in the state of New York as solid waste. **Canadian Federal Regulations:** These products have been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. **WHMIS Classification:** Not Controlled, manufactured article. **New Substance Notification Regulations:** Lithium hexafluorophosphate is listed on the Non-Domestic Substance List (NDSL). All other ingredients in the product are listed, as required, on Canada's Domestic Substances List (DSL). **National Pollutant Release Inventory (NPRI) Substances:** These products do not contain any NPRI chemicals.
**EU Regulations:** Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I: Not listed. Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II: Not listed. Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I as amended: Not listed. Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended: Not listed. Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended: Not listed. Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended: Not listed. Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended: Not listed. Regulation (EC) No. 166/2006, REACH Article 59(10) Candidate List as currently published by ECHA: Not listed. **EU Authorizations:** Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended: Not listed. **EU Restrictions on use:** Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended: Aluminum (CAS 7429-90-5) Directive 2004/37/EC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding: Not listed. **Other EU Regulations** Directive 96/82/EC (Seveso II) on the control of major accident hazards involving dangerous substances: Not listed. Directive 94/33/EC on the protection of young people at work: Not listed. FSSF00058AG Inspired Energy's Page 13 of 15 August 2015 This Safety Data Sheet complies with the requirements of Regulation (EC) No. 1907/2006 and amended on 28 May 2015 by (EU) 2015/830. **Australia and New Zealand SUSMP:** Not applicable **AICS:** All ingredients are on the AICS list. **HSNO Approval number:** Not applicable **HSNO Group Title:** Not applicable **NOHSC:10008 Risk Phrases:** R34 - Causes Burns. **NOHSC:1008 Safety Phrases:** S1 – Keep locked up. S2 – Keep out of reach of children. S23 – Do not breathe vapor. S24/25 – Avoid contact with skin and eyes. S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S27/28 – After contact with skin, take off immediately all contaminated clothing and wash immediately with plenty of water. S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection. S56 – Dispose of this material and its container at hazardous waste or special waste collection point. S62 – If swallowed, DO NOT induce vomiting: seek medical advice immediately and show this container or label. S64 – If swallowed, rinse mouth with water (Only if the person is conscious). **EC Classification for the Substance/Preparation:** These products

are not classified as hazardous according to Regulation (EC) No. 1272/2008. Keep out of the reach of children. **Japanese Regulations** Japanese Industrial Standards (JIS) JIS Z 7253:2012 Waste disposal and public cleaning law Law for Promotion of Effective Utilization of Resources **Taiwanese Regulations** Regulation of Labelling and Hazard Communication of Dangerous and Harmful Materials: Labeling requirements and other relevant provision of chemicals, this product is not classified as dangerous goods. Toxic Chemicals Substance Control Law: Not Listed. CNS 1030016 Safety of primary and secondary lithium cells and batteries during transport. **Chinese Regulations** General Rule for Classification and Hazard Communication of Chemicals (GB 13690-2009): Specifies the classification, labeling and hazard communication of chemicals in compliance with the GHS standard for chemical production sites and labeling of consumer goods. General Rule for Preparation of Precautionary Labels for Chemicals (GB 15258-2009): Specifies the relevant application methods of precautionary labels for chemicals. Safety Data Sheet for Chemical Products Content and Order of Sections (GB/T 16483-2008). **Brazil Regulations:** National Solid Waste Policy (PNRS of CONAMA in compliance with the directives and regulations of National System for the Environment (SISNAMA). **Malaysian Regulations:** Guidelines for the classification of used electrical and electronic equipment in Malaysia, 2nd Edition, 2010 Environmental quality regulations, 2005. Scheduled Waste code: SW103: Waste of batteries containing cadmium and nickel or mercury or lithium.

**15.2 Chemical Safety Assessment:** Not applicable.

## SECTION XVI – OTHER INFORMATION

**Preparation Date:** May 28, 2021
**Prepared by:** Inspired Energy's Compliance Department
**Revision:** V1 - Initial Release
V2 - Update to Section 1.1
V3 - Update to Section 14.1
V4 - Updated Section 2.2.2 and 14.8
V5 - Updated Sections 2.2.2, 3.1, 5.1, 13.2, 14.3, 14.6, 14.8 and 15.1
V6 - Updated Section 1.1, 1.1.2 and 2.2.2
V-7 - Added Report Number to Section 1.2, Updated 1.1
V-8 - Updated Section 1.1
V-9 - 2018 Release
V-10- 2019 Update
V-11- Update Section 1.1, 14.4, and 14.8
V-12- Correction in Table 1.1
V-13- Update Section 1.1
V-14- Update Section 14.6

**Disclaimer:** The information contained within is provided for your information only. The information and recommendations set forth herein are made in good faith and are believed to be accurate as of the date of preparation. However, INSPIRED ENERGY, LLC. MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THIS INFORMATION AND DISCLAIMS ALL LIABILITY FROM RELIANCE ON IT.