



# Mathews Associates, Inc.

## SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION	
<b>IDENTITY:</b> BB-2590/U MIL-PRF-32383 NSN: 6140-01-633-9444	<b>DATE PREPARED</b> NOVEMBER 2015
<b>MANUFACTURER'S NAME</b> Mathews Associates, Inc.	<b>EMERGENCY TELEPHONE NUMBER</b> INFOTRAC 800-535-5053 (US) +1-352-323-3500 (International)
<b>ADDRESS</b> 220 Power Court Sanford, FL 32771 USA	<b>TELEPHONE NUMBER FOR INFORMATION</b> Tele: 407-323-3390 Fax: 407-323-3115 e-mail : www.sales@maifl.com website: www.maifl.com

SECTION 2 – HAZARD(S) IDENTIFICATION	
<b>PRIMARY ROUTE OF EXPOSURE</b>	<b>NO</b>
<b>POTENTIAL HEALTH EFFECTS</b>	
<b>Inhalation:</b> No effect under routine handling and use.	
<b>Skin Contact:</b> No effect under routine handling and use.	
<b>Eye Contact:</b> No effect under routine handling and use.	
<b>Ingestion:</b> No effect under routine handling and use.	
<b>Specific Hazards:</b>	
<b>Existing Conditions Aggravated by Exposure:</b> No effect under routine handling and use.	

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS			
HAZARDOUS COMPONENTS <small>(of the Lithium Ion cell)</small>	OSHA PEL	ACGIH TLV	% of contents
Aluminum Foil	N/A	N/A	2-10 w/w
Metal Oxide (proprietary)	N/A	N/A	20-50 w/w
Polyvinylidene Fluoride (PVDF)	N/A	N/A	<5
Styrene Butadiene Rubber (SBR)	N/A	N/A	<5
Copper Foil	N/A	N/A	2-10 w/w
Carbon (proprietary)	N/A	N/A	10-30 w/w
Electrolyte (proprietary)	N/A	N/A	10-20 w/w
Aluminum and inert materials	N/A	N/A	Remainder

SECTION 4 – FIRST AID MEASURES
<b>EXPOSURE TO INTERNAL MATERIALS DUE TO OUTER CASING DAMAGE:</b>
<b>Inhalation:</b> Leave area immediately and seek medical attention.
<b>Skin Contact:</b> Wash area thoroughly with soap and water and seek medical attention.
<b>Eye Contact:</b> Rinse eyes with water for 15 minutes and seek medical attention.
<b>Ingestion:</b> Drink milk/water and induce vomiting; seek medical attention.
<b>The protection of first-aiders (notes to physicians):</b> If battery is leaking, extremely corrosive HF is produced upon combustion. Demand to use Ca-gluconate cream for first-aid.

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SECTION 5 – FIRE - FIGHTING MEASURES			
Flash Point	FLAMMABLE LIMITS	LEL	UEL
N/A °C		N/A %	N/A %
<b>Autoignition Temperature:</b> Temperature over 125°C (257°F) batteries may burst and release hazardous fumes / and or material.			
<b>Extinguishing Media:</b> Use extinguishing media suitable for the materials that are burning.			
<b>Fire-Fighting Program:</b> If possible, remove cell(s) from fire fighting area. If heated above 125°C, cell(s) can explode/vent.			
<b>Special Equipment for Fire Fighters:</b> Use NIOSH/MSHA approved full-face SCBA (self-contained breathing apparatus) with full protective gear.			
<b>Unusual Fire Or Explosion Hazards:</b> Cell is not flammable but internal organic material will burn if the cell is incinerated. Combustion products include, but are not limited to hydrogen fluoride, carbon monoxide and carbon dioxide.			
SECTION 6 – ACCIDENTAL RELEASE MEASURES			
ON LAND: Place material into suitable containers and call local fire/police department.			
IN WATER: If possible, remove from water and call local fire/police department.			
SECTION 7 – HANDLING AND STORAGE			
HANDLING: No special protective clothing required for handling individual cells.			
STORAGE: Store in a cool, dry place.			
SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION			
<b>Respiratory Protection:</b> None under normal use conditions. SCBA required in the event of a fire.			
<b>Skin Protection:</b> None under normal use conditions. Use gloves when handling leaking batteries.			
<b>Eye/Face Protection:</b> None under normal use conditions. Wear safety glasses when handling leaking batteries.			
<b>Foot Protection:</b> Steel toed shoes recommended for large container handling.			
SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES			
<b>Boiling Point:</b>	N/A	<b>Specific Gravity:</b>	N/A
<b>Vapor Density:</b>	N/A	<b>Melting Point:</b>	N/A
<b>Vapor Pressure:</b>	N/A	<b>Evaporation Rate:</b>	N/A
<b>Solubility in Water:</b>	Insoluble	<b>pH:</b>	N/A
<b>Appearance and Odor:</b> The contents of the battery cells are dark in color. Physical phase is solid. The odor is none.			
SECTION 10 – STABILITY AND REACTIVITY			
<b>Stability:</b>	<b>Unstable</b>		
	<b>Stable</b>	X	
<b>Incompatibility:</b>	None (during normal operation). Avoid exposure to heat, open flame, and corrosives.		
<b>Conditions to Avoid:</b>	Exposure to heat and open flame. Do not puncture, crush or incinerate.		
<b>Materials to Avoid:</b>	Water, Heat, and Acid Material		
<b>Hazardous Decomposition Products:</b>	None (during normal condition). If cells are opened, hydrogen fluoride and carbon monoxide may be released.		

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## SECTION 11 – TOXICOLOGICAL INFORMATION

Cell manufacturer reports none.

## SECTION 12 – ECOLOGICAL INFORMATION

**Possible Environmental Effects / Environmental Mobility:** Do not bury underground as this may create subsoil and ground water pollution.

## SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable federal, state, and local environmental regulations. Recycling or reclamation should be considered.

## SECTION 14 – TRANSPORT INFORMATION

### U.S. Department of Transportation Ground (49 CFR):

**Proper Shipping Name:** Lithium Ion Batteries  
**Hazard Class or Division:** 9  
**Identification Number:** 3480  
**Packing Group:** II  
**Packaging Instruction:** 173.185  
**Environmental Hazards:** See section 12  
**Marine Pollutant:** No  
**Transport in Bulk:** No

### International Air Transportation (ICAO/IATA):

**Proper Shipping Name:** Lithium Ion Batteries  
**Hazard Class or Division:** 9  
**Identification Number:** 3480  
**Packing Group:** II  
**Packaging Instruction:** 965  
**Environmental Hazards:** See section 12  
**Marine Pollutant:** No  
**Transport in Bulk:** No

### Water Transportation (IMO/IMDG):

**Proper Shipping Name:** Lithium Ion Batteries  
**Hazard Class or Division:** 9  
**Identification Number:** 3480  
**Environmental Hazards:** See section 12  
**Marine Pollutant:** No  
**Transport in Bulk:** No

## SECTION 15 – REGULATORY INFORMATION

UN (United Nations): Recommendations on the Transportation of Dangerous Goods Model Regulations  
ICAO (International Civil Aviation Organization): Technical Instructions for the safety transport of dangerous  
IATA (International Air Transport Organization): Dangerous Goods Regulations  
IMO (International Maritime Organization): International Maritime Dangerous Goods (IMDG) Code

## SECTION 16 – Other

Date Prepared: 23NOVEMBER2015

For further information contact SAMSUNG SDI sales representative.

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