Hitachi Automotive Products (USA), Inc.
955 Warwick Road Harrodsburg, KY 40330
Phone: (859) 734-9451 Fax: (859) 734-5309

MATERIAL SAFETY DATA SHEET

Product Name:	Lithium ion Rechargeable Battery
Model Name:	HPB06-48BAA
Nominal Capacity:	5.5Ah
Average Operating Voltage :	174.0V
Chemical system:	Lithium Manganese Oxide (Partially substituted by nickel and cobalt)/Carbon viz.UMnNiCoO1C
Designed for Recharge:	Yes
UN No:	3090
UN CLASS:	9

SECTION I MANUFACTURE'S INFOMATION

Manufacture's name:	Hitachi, Ltd., Automotive Systems
Supplier/Importer's Name:	Hitachi Automotive Products (USA), Inc.
Supplier/Importer Address:	955 Warwick Road Harrodsburg, KY 40330
Information Telephone:	859-734-9451
Emergency Telephone:	1-800-424-9300 (CHEMTREC)
Date Prepared:	July 13, 2007

SECTION II HAZARDOUS INGREDIENTS

IMPORTANT NOTE: The battery pack uses max forty-eight IMA6 Lithium ion rechargeable batteries and control circuit. All batteries are connected in series.

The battery should not be opened, burned, or otherwise compromised since the following ingredients contained within the product could be harmful if exposed or misused. Under normal operation, there is no expected exposure to the following components.

Cathode:	Lithium Manganese Oxide (Li Mn Ni Co O) (active material) Polyvinylidene Fluoride (binder) Graphite (conductive material} Carbon Black (conductive material)
Anode:	Carbon (active material) Polyvinylidene Fluoride (binder)
Electrolyte:	Organic Solvent (non-aqueous liquid) Lithium Salt

Others: Heavy metals such as Mercury, Cadmium, Lead, and Chromium are not used in the cell.

SECTION III FIRE HAZARD DATA

If module catches on fire, take the following measures:

Use self-contained breathing apparatus (SCBA)

Any surrounding combustible items should be removed immediately

Use class D fire extinguishing media. Dry Chemical (ABC) or Carbon dioxide (C02) can be used when class D is not available. Water should be used as a last resort only.

Move to an open ventilated area immediately

SECTION IV HEALTH HAZARD DATA

Under normal condition of use, these chemicals are contained in sealed cells. Risk of exposure occurs only if the cells are mechanically abused or otherwise compromised.

Inhalation: Contents of an opened cell can cause respiratory irritation. Provide fresh air and seek medical attention immediately.

Skin contact: Contents of an opened cell can cause skin irritation. Wash skin with soap and water.

Eye contact: Contents of an opened ce11 can cause eye irritation. Immediately flush eyes thoroughly with water for at least 15 minutes. Seek medical attention.

SECTION V PRECAUTIONS FOR HANDLING AND USE

Storage: Store in cool, well-ventilated area. Do not expose to high temperature (60°C-140° F) or any ignition sources.

Batteries should be stored in an incombustible warehouse.

Batteries should be stored and handled in a way to avoid puncture, crushing, severe jolt, vibration, moisture/water, or other forms of stress.

Since short circuit can cause burn hazard, do not store with metal plate, metal bar, metal covered materials.

When storing, cover battery terminals with insulating caps.

Handling: Do not disassemble or remodel. Do not short + and - terminals with metal. Do not open the battery.

Charging: Charge within the limits of 0°C and 45°C. Charge with specified charger designed

for this battery. Charge by the charge voltage below 196.8V.

Discharging: Discharge within the limits of -20°C and 60°C.

Disposal: Do not dispose in fire or incinerate. If disposal of module is necessary, dispose of according to federal, state, and local environmental regulations. Contact appropriate waste management company.

Puncture or Crush: If electrolyte leaks from the module, take the following measures:

Wear eye protection, rubber gloves, and respiratory protection when handling.

Clean up any electrolyte with dry towel and dispose of according to federal, state, and local environmental regulations.

Do not expose to ignition source.

If the module is punctured or crushed, it should be handled with electrically insulated gloves.

SECTION VI SPECIAL PROTECTION INFORMATION

Respiratory Protection	Not necessary under normal use.
Ventilation	Not necessary under normal use.
Eye Protection	Not necessary under normal use.
Protective Gloves	Not necessary under normal use.

SECTION VII REGULATORY INFORMATION

TSCA – All components are listed on the TSCA Iventory