Product name: HEV Lithium Ion Battery Cell

Safety data sheet for chemical products (SDS)

1.PRODUCT AND COMPANY IDENTIFICATION

· Product name: HEV Lithium Ion Battery Cell

 Product code: Prismatic type cell UF261591Q

* Company name: Automotive & Industrial Systems Company of Panasonic Group

* Address: 194-4, Tokonabe-cho, Kasai-shi, Hyogo, Japan

* Telephone number: +81-790-43-1348 * Telefax number: +81-790-43-2093

* Emergency telephone number: [All day] +81-790-43-1950

2.COMPOSITION / INFORMATION ON INGREDIENTS

* Substance or preparation: Preparation

* Information about the chemical nature of product:

Common chemical name /	CAS number	NIOSH / RTECS	Concentration /
General name		number	Concentration range
Lithium Metal Oxide	None listed	None listed	20-30%
Aluminum	7429-90-5	BD0330000	15-25%
Graphite	7782-42-5	FF5250100	10-20%
Copper	7440-50-8	GL5325000	10-20%
Organic electrolyte	None listed	None listed	15-25%

3.HAZARDS IDENTIFICATION

For the cell, chemical materials are stored in a hermetically sealed Aluminum case, designed to withstand temperatures and pressures encountered during normal use. As a result, during normal use, there is no physical danger of ignition or explosion and chemical danger of hazardous materials' leakage.

However, if exposed to a fire, added mechanical shocks, decomposed, added electric stress by miss-use, the cell case will be breached at the extreme, hazardous materials may be released.

Moreover, if heated strongly by the surrounding fire, acrid gas may be emitted

Most important hazard and effects

Human health effects:

Inhalation: The vapor of the electrolyte causes dizziness and irritates a respiratory tract.

Skin contact: The vapor of the electrolyte irritates a skin. The electrolyte skin contact causes an inflammation and the irritation on the skin.

Eye contact: The vapor of the electrolyte stimulates eyes. The electrolyte eye contact causes a swollen eyelid and the irritation on the eye. Especially, substance that causes a strong inflammation of the eyes is contained.

Environmental effects: Since a cell remains in the environment, do not throw out it into the environment.

· Specific hazards:

If the electrolyte contacts with water, it will generate detrimental hydrogen fluoride.

Since the leaked electrolyte is flammable liquid, do not bring close to fire.

4.FIRST-AID MEASURES

Internal cell materials of an opened battery cell

- * Inhalation: Make the victim blow his/her nose, gargle. Seek medical attention if necessary.
- * Skin contact: Remove contaminated clothes and shoes immediately. Wash extraneous matter or contact region with soap and plenty of water immediately.