

Safety data sheet for chemical products (SDS)

1. PRODUCT AND COMPANY IDENTIFICATION

- Product name : Nickel-Metal Hydride Battery
- Company name : Automotive & Industrial Systems Company, Panasonic Corporation
- Address : 194-4 Tokonabe-cho, kasai-City, Hyogo, 675-2332, Japan
- Telephone number : +81-(0)790-43-1346

2. HAZARDS IDENTIFICATION

- Most important hazard and effects

For the battery cell, chemical materials are stored in a hermetically sealed metal 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 misuse, the gas release vent will be operated. The battery cell case will be breached at the extreme. Hazardous materials may be released.

Moreover, if heated strongly by the surrounding fire, acrid or harmful fume may be emitted.

Human health effects:

Inhalation: The electrolyte inhalation affects the respiratory tract membrane and the lungs. Cadmium fume may cause a cough, chest pain and dyspnea. Bronchitis and pneumonia will be occurred. Probably, it is carcinogen.

Skin contact: The electrolyte skin contact affects the skin seriously and may cause dermatitis.

Eye contact: The electrolyte leaked from the battery cell is strong alkali. When it goes into an eye, the cornea may be affected and it may lead to blindness.

Ingestion: The electrolyte ingestion irritates the mouth and the throat seriously results in vomiting, nausea, hematemesis, stomach pains and diarrhea.

Environmental effects:

Since a battery cell remains in the environment, do not throw out it into the environment.

- Specific hazards :

As previously described.

3. COMPOSITION / INFORMATION ON INGREDIENTS

- Substance or preparation : Preparation
- Information about the chemical nature of product :

Common chemical name / General name	CAS number	Concentration / Concentration range	Classification and hazard labeling
Hydrogen Absorbing Alloy	7440-02-0(Ni) 7429-90-5(Al) 7400-00-8(Nd) 7439-91-0(La) 7440-19-9(Sm) 7439-95-4(Mg)	15-35%	fire hazard specific hazard
Nickel-Cobalt-Zinc oxide	7440-02-0(Ni) 7440-48-4(Co) 7440-66-6(Zn)	10-25%	acute toxicity specific hazard
Nickel	7440-02-0	5-15%	specific hazard
Iron	7439-89-6	25-45%	-
Carbon Black	1333-86-4	0-1%	specific hazard
Potassium Hydroxide	1310-58-3	0-15%	acute toxicity corrosivity irritant property
Sodium Hydroxide	1310-73-2		
Lithium Hydroxide	1310-65-2		