

OPTIMUM BATTERY CO., LTD

Add: No.9 BLDG, ZHUKENG INDUSTRIAL PARK, PINGSHAN TOWN, SHENZHEN, CHINA

MATERIAL SAFETY DATA SHEET

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MATERIAL SAFETY DATA SHEET

N/A=Not Applicable Effective Date 4/98 Rev.7/00

SECTION 1 PRODUCT IDENTIFICATION

PRODUCT NAME: Ni-CD BATTERY

NPCA Hazard Material ID System

Neutralizing Absorber

GENERIC NAME: Dry Powder Chemical Blend

Health 0

PROPER SHIPPING NAME: N/A

Flammability 0

Reactivity 0

Max Personal Protection Sect 8

SECTION 2 INGREDIENTS

2.1 Proprietary : No

Ingredient : Ni(OH)₂

Ingredient Sequence number : 01

Function : major material for positive

Percent : 43

2.2 Proprietary : No

Ingredient : CoO

Ingredient Sequence number : 02

Function : additive for positive

Percent : 4

2.3 Proprietary : No

Ingredient : CdO

Ingredient Sequence number : 03

Function : major material for negative

Percent: 45

2.4 Proprietary : No

Ingredient : Nickel Powder

Ingredient: Sequence number 04

Function : additive for positive

Percent: 4

2.5 Proprietary: No

Ingredient : KOH

Ingredient: Sequence number 05

Function : electrolyte

Percent: 0.5

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SECTION 3 PHYSICAL DATA

BOILING RANGE : N/A
VAPOR PRESSURE : N/A
VAPOR DENSITY : N/A
% VOLATILE : N/A
SOLUBILITY IN WATER: Partial/absorbs water
PHYSICAL DESCRIPTION : Brown particies, no odor
SPECIFIC GRAVITY: 1.3-1.4
PH: N/A
EVAPORATION RATE: N/A

SECTION 4 FIRE & EXPLOSION HAZARD

FLASH POINT: N/A
UPPER EXPLOSIVE LIMIT: N/A
LOWER EXPLOSIVE LIMIT: N/A
EXTINGUISHING METHOD: N/A
SPECIAL FIRE FIGHTING PROCEDURE : N/A
UNUSUAL FIRE&EXPLOSION HAZARD : Useful in suffocating some fires

SECTION 5 REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY: None known
HAZARDOUS DECOMPOSITION PRODUCTS: None known
HAZARDOUS POLYMERIZATION: Will not occur

SECTION 6 STORAGE AND HANDLING

PRECAUTIONS IN HANDLING & STORAGE
For use by trained personnel only keep container closed during storage
Follow good personal hygiene

SECTION 7 HEALTH HAZARDOUS & FIRST AID

EFFECTS OF OVEREXPOSE:
Skin: No adverse effects likely
Eyes: No adverse effects likely
Inhalation: Large amounts may irritate respiratory system
Ingestion: Large amounts may result in nausea
FIRST AID PROCEDURE
Skin: Flush residual debris from skin
Eyes: Flush eyes
Inhalation: Remove to fresh air

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Inhalation: In case of significant amounts induce vomiting
SHOULD SYMPTOMS PERSIST-SEEK MEDICAL ATTENTION

SECTION 8 SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: General ventilation

PROTECTIVE GLOVES: Chemical resistant

VENTILATION: General Ventilation

EYE PROTECTION: Safety goggles or face shield

OTHER PROTECTIVE EQUIPMENT: Follow safety procedure for material to be neutralized

SECTION 9 SPILL OR LEAK PROTECTION INFORMATION

MATERIAL RELEASE OF SPILL: Sweep or vacuum

WASTE DISPOSAL METHOD: Uncontaminated material is not hazardous. Dispose in accordance with local, state, federal regulations.

Section 10 PRECAUTIONS TO ENSURE THE SAFETY ON HANDLING BATTERY

(1) Short-circuiting

Never short-circuit the batteries, that may damage appliances or you may be burned by the heat generated by the batteries.

(2) Throwing batteries into a fire or water

Never throw batteries into a fire. Batteries may leak when disposed of in a fire. Never throw them into water since the battery functions will be lost.

(3) Inserting the batteries with their polarities reversed

Never insert a battery with the positive and negative poles reversed, as this can cause the battery to swell or rupture.

(4) Overcharging at high currents and reverse charging

Never reverse charge or overcharge with high current. Doing so causes rapid gas generation and increased gas pressure, thus causing batteries to swell or rupture.

(5) Disassembly or mutilation

Never disassemble batteries, as the batteries may be short-circuited or the strong alkaline electrolyte inside may hurt skin and clothes.

(6) Using old and new batteries together

Avoid using old and new batteries together. Also avoid using these batteries with ordinary dry-cell, Ni-MH batteries or with another manufacture's batteries.