

SONY

Sony Fukushima Corporation

1-1 Shimosugishita Takakura Hiwada-machi Koriyama-shi Fukushima 963-0531 JAPAN
Phone: 81-24-958-6885 Fax: 81-24-958-5997

MSDS7826

Page 1 of 2

PRODUCT SAFETY DATA SHEET

IDENTITY Product Category : Manganese Dioxide Lithium Battery
 Model Name : CR2032
 Nominal Voltage : 3 V
 Nominal Capacity : 220 mAh
 Chemical System : Manganese Dioxide / Lithium
 Design for Recharge : Yes. No.

SECTION I MANUFACTURER'S INFORMATION

Manufacturer's Name : Sony Fukushima Corporation Koriyama Plant
Supplier's Name : Sony Corp. Micro Systems Network Company Energy Company
Supplier's Address : 1-11-1 Oosaki Shinagawa-ku Tokyo 141-0032 Japan
Information Telephone : Japan +81-3-5435-3291 (Sony Corp. E Co.)
Emergency Telephone : Japan +81-24-958-3811 (Sony Fukushima Corporation)
Date Prepared : April 25, 2003
Signature of Paper : *M. Watanabe*

SECTION II MATERIAL AND INGREDIENTS INFORMATION

Important Note The battery should not be opened or burned since the following ingredients contained within, or their discharge or combustion products, could be harmful under some circumstance if exposed.

Material or Ingredients

Cathode : Manganese Dioxide (CAS# 1313-13-9)
 Graphite (CAS# 7782-42-5)

Anode : Metallic Lithium (0.062g) (CAS# 7439-93-2)

Electrolyte : Dimethoxyethane (CAS# 110-71-4)
 Propylene Carbonate
 Lithium Perchlorate

Others : Heavy Metals such as Mercury, Cadmium and Lead are not added in the battery.

SECTION III FIRE AND EXPLOSION HAZARD DATA

In case of fire, it is permissible to use any class of extinguishing medium on these batteries or their packing material.
Cool exterior of batteries if exposed to fire to prevent rupture.

SECTION IV HEALTH HAZARD DATA

Under normal conditions of use, these chemicals are contained in sealed can; therefore, risk of exposure occurs if the battery is swallowed or mechanically abused.

- Swallowing : Ingestion of a battery can be harmful. Contents of an opened battery can cause serious chemical burns of mouth, esophagus, and gastrointestinal tract. In either case, do not induce vomiting nor give food or drink. Seek medical attention immediately. CALL NATIONAL BATTERY INGESTION HOTLINE for advice and follow-up (U.S.A. 202-625-3333) collect, day or night.
- Inhalation : Contents of an opened battery can cause respiratory irritation. Provide fresh air and call a doctor.
- Skin Contact : Contents of an opened battery can cause skin irritation. Wash skin with soap and water.
- Eye Contact : Contents of an opened battery can cause eye irritation. Immediately flush eyes thoroughly with water for at least 15 minutes. Seek medical attention.

SECTION V PRECAUTIONS FOR SAFE HANDLING AND USE

- Storage : Store in a cool, well-ventilated area. Elevated temperatures can result in shortened battery life. Since short circuit can cause burn hazard and leak or explode hazard, do not batteries jumbled in bulk containers.
- Handling : Do not short. Do not mix different type batteries or mix new and old ones together. Do not directly heat, solder or throw into fire. Such unsuitable use can cause leakage, explosion or fire.
- Charging : This battery is not designed for recharging. To do so can cause battery leakage or explosion.
- Disposal : Dispose in accordance with applicable federal, state and local regulations.
- CAUTION : MAY EXPLODE OR LEAK IF INSERTED INCORRECTLY, SHORTED, DISASSEMBLED, HEATED, DISPOSED OF IN FIRE, OR RECHARGED. KEEP AWAY FROM SMALL CHILDREN. IF SWALLOWED, PROMPTLY SEE A DOCTOR.

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.

DISCLAIMER

The information contained within is provided for your information only.

The information and recommendations set forth herein are made in good faith and are believed to be accurate as of the date of preparation.

However, Sony Corp MSNG Energy Company, MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS INFORMATION AND DISCLAIMS ALL LIABILITY FROM RELIANCE ON IT.