

# MATERIAL SAFETY DATA SHEET

## Dry Battery 4R25 6V

### SECTION1. Product and Company Identification

Product name: Dry Battery 4R25 6V

### SECTION2. Information on Ingredients

Product name: Dry Battery 4R25 6V

Ingredient	Concentration	CAS No.
Manganese Dioxide	34%	1313-13-9
Zinc	15%	7440-66-6
Zinc Chloride	17%	7646-85-7
Ammonium Chloride	2%	12125-02-9
Acetylene Black	9%	1333-86-4

### SECTION 3. Hazards Identification

**Hazards Identification:** This substance is considered to be non-hazardous for transport.

**Emergengy Overview:** Avoid contact and inhalation the internal materials. Emit toxic fumes under fire conditions.

### SECTION 4. First-Aid Measures

**Eyes:**

Not anticipated. If battery is leaking and material contacts eyes, flush with copious amounts of clear, tepid water for 30 minutes. Contact physician at once.

**Skin:**

Not anticipated. If battery is leaking, irrigate exposed skin with copious amounts of clear, tepid water for at least 15 minutes. If irritation, injury or pain persists, consult a physician.

**Inhalation:**

Not anticipated. If battery is leaking, contents may be irritating to respiratory passages. Remove to fresh air. Contact physician if irritation persists.

**Ingestion:**

Not anticipated. Rinse the mouth and surrounding area with clear, tepid water for at least 15 minutes. Consult a physician immediately for treatment and to rule out involvement of the esophagus and other tissues.

### SECTION 5. Fire Fighting Measures

**Fire and Explosion Hazard:**

Batteries may burst and release hazardous decomposition products when exposed to a fire situation. See Sec. 3.

**Extinguishing Media:**

As appropriate for surrounding area.

**Firefighting Procedures:**

Use self-contained breathing apparatus and full protective gear.

### SECTION 6. Accidental Release Measures

**Steps to be taken if material is released to the environment or spilled in the work area:**

Notify safety personnel of large spills. Caustic potassium hydroxide may be released from leaking or ruptured batteries. Avoid eye or skin contact and inhalation of vapors. Increase ventilation. Clean-up personnel should wear appropriate protective gear.

## SECTION 7. Handling and storage

**Storage:**

Store at room temperature.

**Handling:**

Avoid mechanical or electrical abuse. Do not short or install incorrectly. Batteries may explode, pyrolyze or vent if disassembled, crushed, recharged or exposed to high temperatures. Install batteries in accordance with equipment instructions. Do not mix battery systems, such as alkaline and zinc carbon, in the same equipment. Replace all batteries in equipment at the same time. Do not carry batteries loose in pocket or bag. Do not remove battery label.

## SECTION 8. Exposure Controls/Personal Protection

**Engineering Controls:**

General ventilation under normal use conditions.

**Eye Protection:**

None under normal use conditions. Wear safety glasses when handling leaking batteries.

**Skin Protection:**

None under normal use conditions. Use neoprene, rubber or latex gloves when handling leaking batteries.

**Respiratory Protection:**

None under normal use conditions.

**Other:**

Keep batteries away from small children.

## SECTION 9. Chemical/Physical Properties

**Appearance:** Colorful cylinder metal shell (containing dielectric)

**Odor:** Weak odor

**Boiling Point:** N/R

**Melting Point:** N/R

**Vapor Pressure (MM Hg/70 F):** N/R

**Vapor Density (Air=1):** N/R

**Specific Gravity:** 370g/PCS

**Decomposition Temperature:** UNKNOWN

**Evaporation Rate And Ref:** N/R

**Solubility In Water:** Partly soluble in water

**Percent Volatiles By Volume:** N/R

**Viscosity:** N/R

**pH Value:** 12~13

**Corrosion Rate (IPY):** UNKNOWN

**Autoignition Temperature:** N/R

## SECTION 10. Stability and Reactivity

**Stability:** Stable under normal temperatures and pressures.

**Polymerization:** Will not occur.

**Condition to avoid:** Avoid electrical shorting

**Materials to avoid:** Strong oxidizing agents, corrosives.

**Hazardous Decomposition Products:** Thermal degradation may produce hazardous fumes of zinc and manganese; Hydrogen gas; caustic vapors of potassium hydroxide and other toxic by-products.

## SECTION 11. Toxicological Information

**Toxicity Data:** Not available.

**Irritation Data:** The internal battery materials may cause irritation to eyes and skin.

## SECTION 12. Ecological Information

**LD50-LC50 Mixture:** LD 50 oral rat is unknown

**Route of entry - Inhalation:** NO

**Route of entry - Skin:** YES

**Route of entry - Ingestion:** NO

**Health Haz Acute And Chronic:** No health hazard unless battery ruptures. In that event, It may cause burns and irritation.

**Carcinogenicity - NTP:** NO

**Carcinogenicity - IARC:** NO

**Carcinogenicity - OSHA:** NO

### **SECTION13. Disposal Consideration**

**Waste disposal methods:**

Individual consumers may dispose of spent (used) batteries with household trash.

We does not recommend that spent batteries be accumulated (quantities of five gallons or more should be disposed of in a secure landfill), in accordance with appropriate federal, state and local regulations. Do not incinerate, since batteries may explode at excessive temperatures.

### **SECTION14. Transport Informantion**

**DOT**

Non-Hazardous For Transport: This substance is considered to be non-hazardous for transport.

**IATA**

Non-Hazardous For Air Transport: Non-hazardous for air transport.

**IMO**

Non-Hazardous For Sea Transport: Non-hazardous for sea transport.

**ADR/RID Class: None**

Non-Hazardous For Transport: This substance is considered to be non-hazardous for transport.

**UN Number: None**

### **SECTION15. Regulatort Information**

**EU Classification and Labelling Information:**

This material is not classified in the Annex I of Directive 67/548/EEC.

### **SECTION16. Other Information**

**Revision:** 0

**Other Information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. We make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulng from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising from using from using the above information.