

Gillette Environment Health and Safety

Duracell Procell Professional Alkaline Batteries

Manufacturer MSDS Number: 5



SECTION 1 : Chemical Product and Company Identification

MSDS Name: Duracell Procell Professional Alkaline Batteries

Manufacturer Name: Gillette Environment Health and Safety

Address:

37 A Street
Needham, MA 02492

Business Phone: 781-292-8151

For information in North America, call: 781-292-8151

Manufacturer MSDS Revision Date:

11/06/2003
Supersedes: 2/00
Rev: 3

Synonyms:

Procell Alkaline Manganese Dioxide Batteries:
PC1300 (D); PC1400 (C); PC1500 (AA); PC2400 (AAA); PC903 (Lantern); PC908 (6V); PC915 (6V); PC918 (6V); PC1604 (9V); PC9100 (N); PC7K67 (J) and batteries comprised of these cells.

CAS Number: Not applicable

Chemical Formula: Mixture

Molecular Weight: Not available

Gillette Environment Health and Safety

Product Codes:

This MSDS covers discontinued Product No. PC926



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SECTION 2 : Hazardous Ingredients/Identity Information

Chemical Name	CAS#	Percent	
Manganese Dioxide	1313-13-9	35 - 40%	
Chemical Name	CAS#	Percent	
Zinc	7440-66-6	10 - 25%	
Chemical Name	CAS#	Percent	
Potassium Hydroxide (35%)	1310-58-3	5 - 10%	
Chemical Name	CAS#	Percent	
Graphite, natural	7782-42-5	1 - 5%	
Chemical Name	CAS#	Percent	
Graphite, Synthetic	7440-44-0	1 - 5%	



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SECTION 3 : Physical And Chemical Characteristics

Physical State/Appearance:

Cylindrical batteries.

Color:

Contents dark in color.

pH:

Not Available

Vapor Pressure:

@ deg F:
mm Hg: Not Available

Vapor Density:

(Air = 1): Not Available

Boiling Point:

Deg F (Deg C): Not Available

Freezing Point:

Deg F (Deg C): Not Available

Melting Point:

Deg F (Deg C): Not Available

Solubility:

In Water: Not Available

Specific Gravity:

(H₂O=1): Not Available

Evaporation Point:

(Ether = 1): Not Available

Saturated Vapor Concentration:

Saturation in Air (by volume @ deg F): Not Available

Percent Volatile:

Not Available

FlashPoint:

Not Available

Auto Ignition Temp:

Deg F (Deg C): Not Available

Upper Flammable Explosive Limit:

In Air (% by volume): Not Available

Lower Flammable Explosive Limit:

In Air (% by volume): Not Available

Flash Point Test Method(s): Not Available



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SECTION 4 : Fire And Explosion Hazards

Flash Point:

Not Available

Flash Point Method:

Not Available

Upper Flammable or Explosive Limit: In Air (% by volume): Not Available

Lower Flammable or Explosive Limit: In Air (% by volume): Not Available

Auto Ignition Temperature: Deg F (Deg C): Not Available

Extinguishing Media:

As appropriate for surrounding area.

Fire Fighting Instructions:

Use self-contained breathing apparatus and full protective gear.

Unusual Fire Hazards:

Batteries may burst and release hazardous decomposition products when exposed to a fire situation. See Sec. 7.



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SECTION 5 : Health Hazards

Applies to All Ingredients:

Potential Health Effects:

These chemicals and metals are contained in a sealed can. For consumer use, adequate hazard warnings are included on both the package and on the battery. Potential for exposure should not exist unless the battery leaks, is exposed to high temperatures or is mechanically, physically, or electrically abused. Contains concentrated (~35%) potassium hydroxide, which is caustic. Anticipated potential leakage volume of potassium hydroxide is 2 to 20 ml, depending on size. A similar amount of zinc may also leak.

Eye Contact:

Routes of Exposure:
Irritation, including caustic/burns/injury, may occur following exposure to a leaking battery.

Skin Contact:

Routes of Exposure:
Irritation, including caustic burns/injury, may occur following exposure to a leaking battery.

Skin Absorption:

Routes of Exposure:
Not anticipated.

Inhalation:

Routes of Exposure:
Respiratory (and eye) irritation may occur if fumes are released due to heat or an abundance of leaking batteries.

Ingestion:

Routes of Exposure:
Not anticipated due to size of batteries; choking may occur with the smaller AAA battery. Irritation, including caustic burns/injury, may occur following exposure to a leaking battery.

Other Potential Health Effects:

Not applicable



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SECTION 6 : Emergency And First Aid Procedures

Warning Signals: Not applicable

Eye Contact:

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 Contact:

Not anticipated. If battery is leaking, irrigate exposed skin with copious amount 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.

Note to Physicians:

- 1) The primary acutely toxic ingredient is concentrated potassium hydroxide (approximately 35%).
- 2) Anticipated potential leakage volume of potassium hydroxide is 2-20 ml, depending on size.
- 3) This MSDS does not include or address the small button or cell batteries which can be ingested.



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SECTION 7 : Reactivity Data

Chemical Stability:

Stable

Conditions to Avoid:

Do not heat, crush, disassemble, short circuit or recharge.

Incompatibilities with Other Materials:

Contents incompatible with strong oxidizing agents.

Hazardous Polymerization:

Will not occur
Conditions to Avoid: Not applicable

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 8 : Precautions For Safe Handling

Personal Precautions:

In the work area:

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.

Spill Cleanup Measures:

Normal Clean Up: Not applicable

Large Spill:

In the work area:

Notify safety personnel of large spills.

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.

Storage:

Store at room temperature.

Waste Disposal:

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

TCLP:

Environmental Effects: These batteries pass the U.S. EPA's Toxicity Characteristic Leaching Procedure and therefore, may be disposed of with normal waste.

DOT Shipping Name:

Not applicable

DOT Hazard Class: Not applicable

Please note: These batteries are not regulated by U.S. DOT or international agencies as hazardous materials or dangerous goods when shipped. Duracell uses the article name 'Alkaline Batteries – Non-hazardous' on all domestic and internal bills of lading.



SECTION 9 : Control Measures

Engineering Controls:

General ventilation under normal use conditions.

Skin Protection Description:

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

Eye/Face Protection:

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

Respiratory Protection:

None under normal use conditions.

Other Protective:

Keep batteries away from small children.

Exposure Limits:

Occupational Exposure Limits (PEL's, TLV's, etc.)

8-Hour TWAs:

Graphite (all kinds except fibrous):

2 mg/m (ACGIH); (synthetic);

Graphite (all kinds except fibrous):

15 mg/m (total, OSHA); 5 mg/m (respirable, OSHA)

These levels are not anticipated under normal consumer use conditions.

Ingredient Guidelines

Ingredient: Manganese Dioxide

Guideline Type: OSHA PEL-STEL

Guideline Information: (Occupational Exposure Limits) (8-Hour TWA): (As Mn): 5.0 mg/m³ (Ceiling)

Guideline Type: ACGIH TLV-TWA

Guideline Information: (Occupational Exposure Limits) (8-Hour TWA): (As Mn): 0.2 mg/m³ (ACGIH/Gillette)

Ingredient: Potassium Hydroxide (35%)

Guideline Type: ACGIH TLV-STEL

Guideline Information: (Occupational Exposure Limits) (8-Hour TWA): 2 mg/m³ (Ceiling)



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SECTION 10 : Other Information

Applies to all ingredients:

TSCA 8(b): Inventory Status

All ingredients listed in TSCA inventory.

MSDS Revision Date:

11/06/2003

Supersedes: 2/00

Rev: 3

Disclaimer:

The information contained in the Material Safety Data Sheet is based on data considered to be accurate, however, no warranty is expressed or implied regarding the accuracy of the data or the results to be obtained from the use thereof.

OTHER INFORMATION:

ADDITIONAL INFORMATION:

Replaces: 2013.2

This MSDS covers discontinued Product No. PC926

*IF MULTIPLE INGREDIENTS, INCLUDE CAS NUMBERS FOR EACH

Footnotes: Not applicable

Abbreviation:

NA = NOT AVAILABLE

GMEL# 2000.3