

World Headquarters
Hach Company
P.O.Box 389
Loveland, CO USA 80539
(970) 669-3050

MSDS No: M02630

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Battery, Lithium Coin Cell (CR2032), 3.6V
Catalog Number: CR2032MC

Hach Company
P.O.Box 389
Loveland, CO USA 80539
(970) 669-3050

Emergency Telephone Numbers:
(Medical and Transportation)
(303) 623-5716 24 Hour Service
(515)232-2533 8am - 4pm CST

MSDS Number: M02630
Chemical Name: Not Applicable
CAS Number:
Additional CAS No. (for hydrated forms): Not applicable
Chemical Formula: Not Applicable
Chemical Family: Battery, Manganese Dioxide Lithium (Perchlorate)
Intended Use: Battery / Internal Battery Back-up

2. HAZARDS IDENTIFICATION

GHS Classification:
Hazard categories:
GHS Label Elements:
Hazard statements:
Precautionary statements:
HMIS:
Health: 0
Flammability: 0
Reactivity: 0
Protective Equipment: Not applicable
NFPA:
Health: 3
Flammability: 2
Reactivity: 2
Symbol: None
WHMIS Hazard Classification: Not applicable
WHMIS Symbols: Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components according to GHS:

Manganese Dioxide

CAS Number: 1313-13-9
Chemical Formula: MnO₂
GHS Classification:
Percent Range (Trade Secret): 10 - 45
Percent Range Units: weight / weight
PEL: Ceiling: 5 mg/m³
TLV: TWA: 0.2 mg/m³

WHMIS Symbols: Oxidizing

Lithium

CAS Number:

Chemical Formula: Li

GHS Classification:

Percent Range (Trade Secret): 1-3

Percent Range Units: weight / weight

PEL: Not established

TLV: Not established

WHMIS Symbols: Corrosive

Hazardous Components according to GHS: No

Other components, each

CAS Number: Not applicable

Chemical Formula: Not applicable.

GHS Classification: Not applicable

Percent Range (Trade Secret): 40 - 70

Percent Range Units: weight / weight

PEL: Not established

TLV: Not established

WHMIS Symbols: Not applicable

Propylene carbonate

CAS Number:

Chemical Formula: C₄H₆O₃

GHS Classification:

Percent Range (Trade Secret): 3-9

Percent Range Units: weight / weight

PEL: Not established

TLV: Not established

WHMIS Symbols:

1,2-DIMETHOXYETHANE, 99+%

CAS Number: 110-71-4

Chemical Formula: C₄H₁₀O₂

GHS Classification:

Percent Range (Trade Secret): 1.0 - 5.0

Percent Range Units: weight / weight

PEL: Not Established

TLV: Not Established

WHMIS Symbols:

Lithium perchlorate

CAS Number:

Chemical Formula: LiClO₄

GHS Classification:

Percent Range (Trade Secret): 0.3-1.5

Percent Range Units: weight / weight

PEL: Not established

TLV: Not established

WHMIS Symbols:

4. FIRST AID MEASURES

General Information:

Advice to doctor:

This product is a manufactured article as defined in 29 CFR 1910.1200. The ingredients are contained in a sealed case, designed to withstand the temperatures and pressures encountered in normal transportation, storage and use. Exposure risks occur only if battery is mechanically or electrically abused including subsection to excessive heat and/or pressure.

Eye Contact: Immediately flush eyes with water for 15 minutes. Call physician.

Skin Contact (First Aid): Wash skin with plenty of water for 15 minutes. Remove contaminated clothing. Call physician immediately.

Inhalation: None required.

Ingestion (First Aid): Call physician immediately.

5. FIRE FIGHTING MEASURES

Flammable Properties: May explode when exposed to heat.

Fire Fighting Instruction: As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear. Containers can build up pressure if exposed to heat.

Extinguishing Media: Carbon dioxide Alcohol foam. Dry chemical.

Extinguishing Media NOT To Be Used:

Fire / Explosion Hazards: May explode or cause burns if disassembled, crushed or exposed to high temperatures. Shorting and/or installation with incorrect polarity may cause fire/explosion hazard.

Hazardous Combustion Products: May emit acrid smoke and fumes.

6. ACCIDENTAL RELEASE MEASURES

Spill Response Notice:

Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance.

Containment Technique: Stop spilled material from being released to the environment.

Clean-up Technique: Dispose of material in government approved hazardous waste facility.

Evacuation Procedure: Evacuate local area (15 foot radius or as directed by your facility's emergency response plan) if the article is broken and contents are spilled.

DOT Emergency Response Guide Number:

7. HANDLING AND STORAGE

Handling: Do not disassemble, apply excessive pressure or deform. Do not short circuit, charge or solder the battery directly. Avoid forced discharge of battery. Do not heat. May burst or release toxic materials. Perchlorate Material - special handling may apply. In California, see www.dtsc.ca.gov/hazardouswaste/perchlorate.

Storage: Do not store in direct sunlight. Store in a cool, dry place. Protect from: moisture acids / acid fumes. extreme temperatures

Flammability Class: Not applicable

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Not applicable

Personal Protective Equipment:

Eye Protection: Not applicable

Skin Protection: Not applicable

Inhalation Protection: Not applicable

Precautionary Measures: Avoid contact with: acids/acid fumes sparks, flames and other ignition sources Protect from: moisture

TLV: Not applicable

PEL: Not applicable

For Occupational Exposure Limits (OEL) for ingredients, see section 3 - Composition/Information on Ingredients.:

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Battery

Physical State: Sealed can, canister or tube

Molecular Weight: Not Applicable

Odor: Not applicable

Odor Threshold:
pH: Not applicable
Metal Corrosivity:
 Corrosivity Classification:
 Steel: Not applicable
 Aluminum: Not applicable
Specific Gravity/ Relative Density (water = 1; air =1): Not applicable
Viscosity:
Solubility:
 Water: Not applicable
 Acid: Not applicable
 Other: Not applicable
Partition Coefficient (n-octanol / water): Not applicable
Coefficient of Water / Oil: Not applicable
Melting Point: Not applicable
Decomposition Temperature:
Boiling Point: Not applicable
Vapor Pressure: Not applicable
Vapor Density (air = 1): Not applicable
Evaporation Rate (water = 1): Not applicable
Volatile Organic Compounds Content: Not applicable
Flammable Properties:
Flash Point: Not Applicable
 Method: Not applicable
Flammability Limits:
 Lower Explosion Limits: Not Applicable
 Upper Explosion Limits: Not Applicable
Autoignition Temperature: Not Determined
Explosive Properties:
Oxidizing Properties:
Reactivity Properties:
Gas under Pressure:
Not classified according to GHS criteria.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable when stored under proper conditions.
Mechanical Impact:
Static Discharge:
Reactivity / Incompatibility: acids conductive materials seawater strong oxidizers
Hazardous Decomposition: Acidic or harmful gas during a fire
Conditions to Avoid: Contact with acid or acid fumes Contact with water or steam. Excess moisture Exposure to direct sunlight. High temperatures exceeding 35 deg C

11. TOXICOLOGICAL INFORMATION

Toxicokinetics, Metabolism and Distribution:
Toxicologically Synergistic Products: None reported
Acute Toxicity:
Specific Target Organ Toxicity - Single Exposure (STOT-SE):
Specific Target Organ Toxicity - Repeat Exposure (STOT-RE):
Skin Corrosion/Irritation:
Eye Damage:
Sensitization:
CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction):
This product does NOT contain any NTP listed chemicals.
This product does NOT contain any OSHA listed carcinogens.
Symptoms/Effects:
Ingestion: If broken open, may cause: burns of the mouth and esophagus
Inhalation: If broken open, may cause:
Skin Absorption:

Chronic Effects: No effects anticipated
Medical Conditions Aggravated: None reported

12. ECOLOGICAL INFORMATION

Product Ecological Information:

Do not place in landfill. Recycle appropriately.

Ingredient Ecological Information:

No ecological data available for the ingredients of this product.

13. DISPOSAL CONSIDERATIONS

EPA Waste ID Number:

Special Instructions (Disposal): Do NOT incinerate or subject battery to temperatures in excess of 212 degrees fahrenheit. Cells may rupture. Perchlorate Material - special handling may apply. In California, see www.dtsc.ca.gov/hazardouswaste/perchlorate. Lithium- manganese dioxide batteries are not listed as a hazardous waste. Recycle at an approved recycling facility or dispose as ordinary waste.

Empty Containers: Not applicable

NOTICE (Disposal): These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information.

14. TRANSPORT INFORMATION

D.O.T.:

D.O.T. Proper Shipping Name: Lithium battery

Hazard Class: 9

Subsidiary Risk: NA

ID Number: UN3090

Packing Group: II

T.D.G.:

Proper Shipping Name:

Hazard Class:

Subsidiary Risk:

UN Number/PIN:

Packing Group:

I.C.A.O.:

I.C.A.O. Proper Shipping Name: Lithium batteries

Hazard Class: 9

Subsidiary Risk: NA

ID Number: UN3090

Packing Group: II

I.M.O.:

Proper Shipping Name: Lithium batteries

Hazard Class: 9

Subsidiary Risk: NA

ID Number: UN3090

Packing Group: II

Additional Information: The batteries do not contain more than 1 gram of Lithium per cell respectively 2 gram Lithium per battery. Batteries certified by manufacturer to have been tested under provisions of UN Manual of Tests and Criteria, clause 38.3. This item may be shipped already installed in equipment. In this case, the ID Number is UN3091 and the proper shipping name is Lithium Batteries Contained in Equipment. Class 9

15. REGULATORY INFORMATION

U.S. Federal Regulations:

O.S.H.A.: This product is an "Article" as defined in the Hazard Communication Standard (29 CFR. 1910.1200)

E.P.A.:

S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370): Not applicable

S.A.R.A. Title III Section 313 (40 CFR 372): Not applicable

302 (EHS) TPQ (40 CFR 355): Not applicable

304 CERCLA RQ (40 CFR 302.4): Not applicable

304 EHS RQ (40 CFR 355): Not applicable

Clean Water Act (40 CFR 116.4): Not applicable

RCRA: Contains no RCRA regulated substances.

State Regulations:

California Prop. 65: Not applicable

Identification of Prop. 65 Ingredient(s):

California Perchlorate Rule CCR Title 22 Chap 33: Yes

Trade Secret Registry: Not applicable

National Inventories:

U.S. Inventory Status: Article exemption. All ingredients within are listed on the TSCA 8(b) Inventory (40CFR710).

CAS Number:

Canadian Inventory Status:

EEC Inventory Status:

Australian Inventory (AICS) Status:

New Zealand Inventory (NZIoC) Status:

Korean Inventory (KECI) Status:

Japan (ENCS) Inventory Status:

China (PRC) Inventory (MEP) Status:

16. OTHER INFORMATION

References:

Complete Text of H phrases referred to in Section 3:

Revision Summary: Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS (ST/SG/AC.10/36/Add.3).

Date of MSDS Preparation:

Day: 11

Month: June

Year: 2014

MSDS Prepared:

CCOHS Evaluation Note:

Legend:

NA - Not Applicable

w/w - weight/weight

ND - Not Determined

w/v - weight/volume

NV - Not Available

v/v - volume/volume

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

HACH COMPANY ©2015