

Version 1.0 SDS Number: 400000000738 Revision Date: 08/07/2023

SECTION 1. IDENTIFICATION

Product name : PURELL® HEALTHY SOAP® with CLEAN RELEASE®

Technology Foam

Manufacturer or supplier's details

Company name of supplier : GOJO Industries, Inc.

Address : One GOJO Plaza, Suite 500

Akron, Ohio 44311

Telephone : 1 (330) 255-6000

Emergency telephone : CHEMTREC 1-800-424-9300

number CHEMTREC +1-703-527-3887: Outside USA & CANADA

Recommended use of the chemical and restrictions on use

Recommended use : Skin-care

Restrictions on use : This is a personal care or cosmetic product that is safe for

consumers and other users under normal and reasonably foreseeable use. Cosmetics and consumer products, specifically defined by regulations around the world, are exempt from the requirement of an SDS for the consumer. While this material is not considered hazardous, this SDS contains valuable information critical to the safe handling and proper use of the product for industrial workplace conditions as well as unusual and unintended exposures such as large spills. This SDS should be retained and available for

employees and other users of this product. For specific intended-use guidance, please refer to the information

provided on the package or instruction sheet.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 3

Eye irritation : Category 2A

GHS label elements

Hazard pictograms :





Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.

H319 Causes serious eye irritation.

Precautionary statements : **Prevention**:

P210 Keep away from heat/sparks/open flames/hot surfaces. -



Version 1.0 SDS Number: 40000000738 Revision Date: 08/07/2023

No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting/

equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P280 Wear eye protection/ face protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

P370 + P378 In case of fire: Use dry sand, dry chemical or

alcohol-resistant foam to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical name	CAS-No.	Concentration (%)
Ethyl Alcohol	64-17-5	>= 10 - < 20
Sodium Laureth Sulfate	68585-34-2	>= 1 - < 5
Glycerin	56-81-5	>= 1 - < 5
Limonene	5989-27-5	>= 0.1 - < 1

SECTION 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical

advice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled : If inhaled, remove to fresh air.

If symptoms persist, call a physician.

: Get medical attention if irritation develops and persists. In case of skin contact In case of eye contact

: In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Seek medical advice.

If swallowed, DO NOT induce vomiting. If swallowed

> Rinse mouth with water. Obtain medical attention.

Most important symptoms and effects, both acute and : Causes serious eye irritation.



Version 1.0 SDS Number: 400000000738 Revision Date: 08/07/2023

delayed

Protection of first-aiders : First Aid responders should pay attention to self-protection

and use the recommended protective clothing

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or

carbon dioxide.

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

: Do not use a solid water stream as it may scatter and spread

fire.

Cool closed containers exposed to fire with water spray.

Flash back possible over considerable distance.

May form explosive mixtures in air.

Exposure to decomposition products may be a hazard to

health.

Carbon oxides

Nitrogen oxides (NOx)

Metal oxides

Hazardous combustion

products

: Carbon oxides

Nitrogen oxides (NOx)

Metal oxides

Specific extinguishing

methods

: Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Use water spray to cool unopened containers.

Further information : Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

Special protective equipment

for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.

Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

Keep people away from and upwind of spill/leak.

Material can create slippery conditions.

Environmental precautions : Discharge into the environment must be avoided.

Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

: Non-sparking tools should be used. Soak up with inert absorbent material.

Suppress (knock down) gases/vapours/mists with a water

spray jet.

Keep in suitable, closed containers for disposal.



Version 1.0 SDS Number: 400000000738 Revision Date: 08/07/2023

Clean contaminated floors and objects thoroughly while

observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : For personal protection see section 8.

Keep away from heat.

Use with local exhaust ventilation.

Avoid contact with eyes.

Conditions for safe storage : Take measures to prevent the build up of electrostatic charge.

Keep in properly labelled containers.

Keep containers tightly closed in a dry, cool and well-

ventilated place.

Store in accordance with the particular national regulations.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ethyl Alcohol	64-17-5	TWA	1,000 ppm 1,900 mg/m3	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m3	OSHA Z-1
		STEL	1,000 ppm	ACGIH
Glycerin	56-81-5	TWA (mist, respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (mist, total dust)	15 mg/m3	OSHA Z-1
Limonene	5989-27-5	TWA	20 ppm	ACGIH

Hazardous components without workplace control parameters

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally

required.

Hand protection

Remarks : No special protective equipment required.

Eye protection : Wear face-shield and protective suit for abnormal processing

problems.

Skin and body protection : No special measures necessary provided product is used

correctly.

Protective measures : Choose body protection in relation to its type, to the

concentration and amount of dangerous substances, and to

the specific work-place.

Ensure that eye flushing systems and safety showers are

located close to the working place.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice.

Avoid contact with eyes.



Version 1.0 SDS Number: 400000000738 Revision Date: 08/07/2023

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : clear, colourless, light yellow

Odour : like fruit

Odour Threshold : No data available

pH : 5.1 - 7.8, (20 °C)

Solidification / Setting point : -4.6 °C

Initial boiling point and boiling : 77 °C

range

Flash point : 32.8 °C

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : Does not sustain combustion.

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Density : 0.98 g/cm3

Partition coefficient: n-

octanol/water

: Not applicable

Auto-ignition temperature : No data available

Thermal decomposition : The substance or mixture is not classified self-reactive.

Viscosity

Viscosity, kinematic : 10 - 20 mm2/s (20 °C)

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard. Chemical stability : Stable under normal conditions.

Possibility of hazardous : Vapours may form explosive mixture with air.

reactions

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents



Version 1.0 SDS Number: 400000000738 Revision Date: 08/07/2023

Hazardous decomposition

products

: No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Eye contact Skin contact

Acute toxicity

Not classified based on available information.

Components:

Ethyl Alcohol:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 124.7 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Sodium Laureth Sulfate:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Assessment: The substance or mixture has no acute oral

toxicity

Glycerin:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Limonene:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Assessment: The substance or mixture has no acute oral

toxicity

Remarks: Based on data from similar materials

Skin corrosion/irritation

Not classified based on available information.

Product:

Assessment: Not irritating when applied to human skin.

Result: No skin irritation

Components:

Ethyl Alcohol: Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

Sodium Laureth Sulfate:

Result: Skin irritation

Glycerin:



Version 1.0 SDS Number: 400000000738 Revision Date: 08/07/2023

Result: No skin irritation

Limonene:Species: Rabbit
Result: Skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Components: Ethyl Alcohol:

Species: Rabbit

Result: Irritation to eyes, reversing within 21 days

Method: OECD Test Guideline 405

Sodium Laureth Sulfate:

Result: Eye irritation

Remarks: Severe eye irritation

Glycerin:

Result: No eye irritation

Limonene: Species: Rabbit

Result: No eye irritation

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information.

Components:

Ethyl Alcohol:

Test Type: Local lymph node assay (LLNA)

Exposure routes: Skin contact

Species: Mouse Result: negative

Limonene:

Test Type: Local lymph node assay (LLNA)

Exposure routes: Skin contact

Species: Mouse Result: positive

Assessment: Probability or evidence of skin sensitisation in humans

Germ cell mutagenicity

Not classified based on available information.

Components:

Ethyl Alcohol:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test

Result: negative



Version 1.0 SDS Number: 400000000738 Revision Date: 08/07/2023

Genotoxicity in vivo : Test Type: Rodent dominant lethal test (germ cell) (in vivo)

Test species: Mouse Application Route: Ingestion

Result: negative

Glycerin:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

Result: negative

Limonene:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test

Result: negative

Genotoxicity in vivo : Test Type: Transgenic rodent somatic cell gene mutation

assay

Test species: Rat

Application Route: Ingestion

Result: negative

Carcinogenicity

Not classified based on available information.

Components:

Glycerin: Species: Rat

Application Route: Ingestion

Exposure time: <** Phrase does not exist: 2 - **> Years

Result: negative

Limonene: Species: Mouse

Application Route: Ingestion

Exposure time: <** Phrase does not exist: 103 - **> weeks

Result: negative

IARC No component of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHANo component of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

NTP No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

Reproductive toxicity

Not classified based on available information.

Components:

Ethyl Alcohol:



Version 1.0 SDS Number: 400000000738 Revision Date: 08/07/2023

Effects on fertility Test Type: Two-generation reproduction toxicity study

Species: Mouse

Application Route: Ingestion Method: OECD Test Guideline 416

Result: negative

Glycerin:

Effects on fertility Test Type: Two-generation reproduction toxicity study

Species: Rat

Application Route: Ingestion

Result: negative

Effects on foetal Test Type: Embryo-foetal development

development Species: Rabbit

Application Route: Ingestion

Result: negative

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

Ethyl Alcohol:

Species: Rat

NOAEL: 2,400 mg/kg Application Route: Ingestion

Exposure time: <** Phrase does not exist: 2 y - **>

Glycerin: Species: Rat

NOAEL: 167 mg/m3

LOAEL: 660 mg/m3

Application Route: inhalation (dust/mist/fume) Exposure time: <** Phrase does not exist: 13 w - **>

Symptoms: Local irritation

Limonene:

Species: Rat NOAEL: 600 mg/kg

Application Route: Ingestion

Exposure time: <** Phrase does not exist: 13 w - **>

Aspiration toxicity

Not classified based on available information.

Components:

Limonene:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.



Version 1.0 SDS Number: 400000000738 Revision Date: 08/07/2023

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components: Ethyl Alcohol:

: LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l Toxicity to fish

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): > 1,000 mg/l

Exposure time: 48 h

: EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l Toxicity to algae

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

: NOEC (Daphnia magna (Water flea)): 9.6 mg/l

Exposure time: 9 d

Toxicity to bacteria : EC50 (Photobacterium phosphoreum): 32.1 mg/l

Exposure time: 0.25 h

Glycerin:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 54,000 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 1,955 mg/l

Exposure time: 48 h

: NOEC (Pseudomonas putida): > 10,000 mg/l Toxicity to bacteria

Exposure time: 16 h

Limonene:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 0.72 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 0.36 mg/l

Exposure time: 48 h

Toxicity to algae : ErC50 (Desmodesmus subspicatus (green algae)): 150 mg/l

Exposure time: 72 h

Test substance: Water Accommodated Fraction Remarks: Based on data from similar materials

M-Factor (Acute aquatic

toxicity)

: 1

Persistence and degradability

Components:

Ethyl Alcohol:

Biodegradability : Result: Readily biodegradable.

> Biodegradation: 84 % Exposure time: 20 d



Version 1.0 SDS Number: 400000000738 Revision Date: 08/07/2023

Sodium Laureth Sulfate:

Biodegradability : Result: Readily biodegradable.

Glycerin:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 94 % Exposure time: 1 d

Limonene:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 80 % Exposure time: 28 d

Remarks: Based on data from similar materials

Bioaccumulative potential

Components:

Ethyl Alcohol:

Partition coefficient: n-

: log Pow: -0.35

octanol/water **Glycerin**:

Partition coefficient: n-

octanol/water

: log Pow: -1.76

Limonene:

Partition coefficient: n-

octanol/water

: log Pow: 4.38

Mobility in soilNo data available

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of

Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a

Class I or Class II ODS as defined by the U.S. Clean Air Act

Section 602 (40 CFR 82, Subpt. A, App.A + B).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Dispose of as unused product.

Empty containers should be taken to an approved waste

handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

International Regulation



Version 1.0 SDS Number: 400000000738 Revision Date: 08/07/2023

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

National Regulations

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Fire Hazard

Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI

Intermediate or Final VOC's (40 CFR 60.489):

Ethyl Alcohol 64-17-5 17.62 % Glycerin 56-81-5 1.75 %

This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.

Clean Water Act

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

California Prop 65 This product does not require a warning label under California

Proposition 65.

The components of this product are reported in the following inventories:

TSCA : On the inventory, or in compliance with the inventory

AICS : On the inventory, or in compliance with the inventory



Version 1.0	SDS Number: 40000000738	Revision Date: 08/07/2023
DSL	: On the inventory, or in complian	nce with the inventory
ENCS	: On the inventory, or in complian	nce with the inventory
ISHL	: On the inventory, or in complian	nce with the inventory
KECI	: On the inventory, or in complian	nce with the inventory
PICCS	: On the inventory, or in complian	nce with the inventory
IECSC	: On the inventory, or in complian	nce with the inventory
NZIoC	: On the inventory, or in complian	nce with the inventory

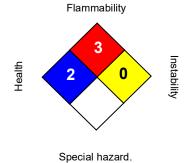
Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:



0 = not significant, 1 = Slight,

2 = Moderate, 3 = High 4 = Extreme, * = Chronic

Revision Date : 08/07/2023

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



Page 1 of 6 Alkaline Manganese Dioxide-Zinc Batteries

ARTICLE INFORMATION SHEET/SAFETY DATA SHEET (AIS/SDS)

Alkaline Manganese Dioxide-Zinc Battery

This Article Information Sheet (AIS) provides relevant battery information to retailers, consumers, OEMs and other users requesting a GHS-compliant SDS. Articles, such as batteries, are exempt from GHS SDS classification criteria. The GHS criteria is not designed or intended to be used to classify the physical, health and environmental hazards of an article. Branded consumer batteries are defined as electro-technical devices. The design, safety, manufacture, and qualification of Energizer and Rayovac branded consumer batteries follow ANSI and IEC battery standards.

SECTION 1 - Identification

Product Name: Energizer		Document Number: 1022-Alk	
Chemical System	n: Alkaline Manganese Dioxide-Zinc	Date Prepared: January 2023	
Desig	ned for Recharge: No	Valid Until: January 2026	
Pre	epared by: Energizer		
Energizer Brands, LLC 533 Maryville University Drive St. Louis, MO 63141	Email for Information: <u>customersupport@energizer.com</u> 1-800-383-7323	Description Use Brand IEC Designation Sizes Image	Alkaline Manganese Dioxide-Zinc Battery Portable power source ENERGIZER/EVERREADY ncluded but not limited to: LR8D425, LR03, LR6, LR14, LR20, 6LR61, LR1, 4LR25Y, 6LF22 ncluded but not limited to: AAAA, AAA, AA, C, D, 9V, N, Lantern

SECTION 2 – Hazards Identification

Not applicable to Batteries which are classified as Articles

Articles, such as batteries, are exempt from GHS SDS classification criteria. The GHS criteria are not designed or intended to be used to classify the physical, health and environmental hazards of an article.

Inhalation: Contents of an open battery can cause respiratory irritation. **Skin Contact:** Contents of an open battery can cause skin irritation. **Eye Contact:** Contents of an open battery can cause severe irritation.



Page 2 of 6 Alkaline Manganese Dioxide-Zinc Batteries

SECTION 3 – Composition / Information

The battery should not be opened or burned. Exposure to the ingredients contained within or their combustion products could be harmful.

All Energizer Alkaline Manganese Dioxide-Zinc have zero added mercury.

MATERIAL OR INGREDIENT	CAS #	%/wt.
Graphite	7782-42-5	2-6
Manganese Dioxide	1313-13-9	30-45
Potassium Hydroxide	1310-58-3	4-8
Zinc	7440-66-6	12-25
Non-Hazardous Components Steel	65997-19-5	18-22
Water, Paper, Plastic and Other		Balance

SECTION 4 – First Aid Measures

Ingestion: Do not induce vomiting or give food or drink. Seek medical attention immediately. CALL NATIONAL BATTERY INGESTION HOTLINE for advice and follow-up (800-498-8666) day or night.

Skin and Eyes: In the even that a battery ruptures, flush exposed skin with flowing lukewarm water for a minimum of 15 minutes. Get immediate medical attention for eyes. Wash skin with soap and water.

SECTION 5 - Fire Hazard & Firefighting

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.

Fire fighters should wear self-contained breathing apparatus.

SECTION 6 – Accidental Release Measures

Not applicable to Batteries which are classified as Articles

TO CONTAIN AND CLEAN UP LEAKS OR SPILLS: In the event of a battery rupture, prevent skin contact and collect all released material in a plastic lined metal container.

REPORTING PROCEDURE: Report all spills in accordance with Federal, State and Local reporting requirement.



Page 3 of 6 Alkaline Manganese Dioxide-Zinc Batteries

SECTION 7 - HANDLING AND STORAGE

Storage: Store in a cool, well ventilated area. Elevated temperatures can result in shortened battery life.

Mechanical Containment: Designers of any water or air-tight device should be aware of the normal evolution of hydrogen gas from alkaline batteries. This gas must be either absorbed or allowed to escape to avoid a potential safety issue.

Handling: Accidental short circuit for a few seconds will not seriously affect the battery. Prolonged short circuit will cause the battery to lose energy through heating, and can cause the safety release vent to open. Sources of short circuits include jumbled batteries in bulk containers, metal jewelry, metal covered tables or metal belts used for assembly of batteries into devices.

Soldering directly to a battery is not recommended. If welding to the battery is required, consult your Energizer sales representative for proper precautions to prevent seal damage or short circuit.

Charging: This battery is manufactured in a charged state. It is not designed for recharging. Recharging can cause battery leakage or, in some cases, high pressure rupture. Inadvertent charging can occur if a battery is installed backwards.

Labeling: The label acts as an electrical insulation for the battery can. Damage to the label can increase the potential for a short circuit.

WARNING: Do not install backwards, charge, put in fire, or mix with other battery types as it may explode or leak causing injury. **Replace all batteries at the same time.**

SECTION 8 – Exposure Controls

Not applicable to Batteries which are classified as Articles

In case of rupture or leakage use hand protection. Avoid contact with skin and eyes

SECTION 9 – TRANSPORT INFORMATION

Not applicable to Batteries which are classified as Articles

SECTION 10 – STABILITY AND REACTIVITY

STABLE OR UNSTABLE: Stable

INCOMPATIBILITY (MATERIALS TO AVOID): Not Applicable to articles. HAZARDOUS DECOMPOSITION PRODUCTS: Not Applicable to articles. DECOMPOSITION TEMPERATURE (0°F): Not Applicable to articles.

HAZARDOUS POLYMERIZATION: Will Not Occur

CONDITIONS TO AVOID: Avoid electrical shorting, puncturing or deform



Page 4 of 6 Alkaline Manganese Dioxide-Zinc Batteries

SECTION 11 – TOXILOGICAL INFORMATION

MATERIAL OR INGREDIENT	PEL (OSHA)	TLV (ACGIH)	%/wt.
Graphite (CAS# 7782-42-5)	15 mg/m³ TWA (total dust) 5 mg/m³ TWA (respirable fraction)	2 mg/m³ TWA (respirable fraction)	2-6
Manganese Dioxide (CAS# 1313-13-9)	5 mg/m³ Ceiling (as Mn)	0.2 mg/m³ TWA (as Mn)	30-45
Potassium Hydroxide (CAS# 1310-58-3)	None established	2 mg/m ³ Ceiling	4-8
Zinc (CAS# 7440-66-6)	15 mg/m ³ TWA PNOR* (total dust) 5 mg/m ³ TWA PNOR* (respirable fraction)	10 mg/m³ TWA PNOC** (inhalable particulate) 3 mg/m³ TWA PNOC** (respirable particulate)	12-25
Non-Hazardous Components Steel iron CAS# 65997-19-5	None established	None established	18-22
Water, Paper, Plastic and Other	None established	None established	Balance

SECTION 12 – Ecological Information

Dispose of properly when discharged. Use a recycling outlet if available. Those collecting batteries should follow state and federal regulations.

Partially discharged damaged batteries can overheat and cause fires in the presence of other combustible materials.

SECTION 13 – Disposal Considerations

Dispose of in accordance with all applicable federal, state and local regulations. Appropriate disposal technologies include incineration and land filling.



Page 5 of 6 Alkaline Manganese Dioxide-Zinc Batteries

SECTION 14 - TRANSPORT INFORMATION

In general, all batteries in all forms of transportation (ground, air, or ocean) must be packaged in a safe and responsible manner. Regulatory concerns from all agencies for safe packaging require that batteries be packaged in a manner that prevents short circuits and be contained in "strong outer packaging" that prevents spillage of contents. All original packaging for Energizer alkaline batteries has been designed to be compliant with these regulatory concerns.

Alkaline batteries (sometimes referred to as "Dry cell" batteries) are not listed as dangerous goods under the ADR European Agreement Concerning the International Carriage of Dangerous Goods by Road, the IMDG International Maritime Dangerous Goods Code, UN Dangerous Good Regulations, IATA Dangerous Goods Regulations, ICAO Technical Instructions and the U.S. hazardous materials regulations (49 CFR). These batteries are not subject to the dangerous goods regulations provided they meet the requirements contained in the following special provisions.

Regulatory Body	Special Provisions	
ADR	Not regulated	
IMDG	Not regulated	
UN	Not regulated	
US DOT	49 CFR 172.102 Provision 130	
IATA	A123	
ICAO	Not regulated	

All Energizer alkaline batteries are packed in such a way to prevent short circuits or the generation dangerous quantities of heat and meet the special provisions listed above. In addition, the IATA Dangerous Goods Regulations and ICAO Technical Instructions require the words "not restricted" and the Special Provision number A123 be provided on the air waybill, when an air waybill is issued.

For emergency information call ChemTel 1-800-526-4727 (North America) or 1-314-985-1511 (International).

SECTION 15 - REGULATORY INFORMATION

Applicable Battery Industry Standards

North America Standards	ANSI C18.3M Part 1	ANSI C18.3 M Part 2	ANSI C18.4
International Standards	IEC 60086-1	IEC 60086-2	IEC 60086-4

15.1 Battery

- 1. **SARA/TITLE III**: As an article, this battery and its contents are not subject to the requirements of the Emergency Planning and Community Right-To-Know Act.
- USA EPA Mercury Containing & Rechargeable Battery Management Act of 1996: No mercury added
- 3. EU Battery Directive 2006/66/EC Amended 2013/56/EU: Energizer batteries are compliant with all aspects of the Directive



Page 6 of 6 Alkaline Manganese Dioxide-Zinc Batteries

15.2 General

- 1. CPSIA 2008: Exempt
- 2. US CPSC FHSA (16 CFR 1500): Not applicable since batteries are defined as articles
- USA EPA TSCA (40 CFR 707.20): Not applicable since batteries are defined as articles
- 4. USA EPA RCRA (40 CFR 261): Classified as non-hazardous waste per ignitable, corrosive, reactive or toxicity testing
- 5. California Prop 65: No warning required
- 6. DTSC Perchlorate labeling: No warning required
- 7. **EU REACH SVHC:** No REACH listed substances of very high concern are present above 0.1% w/w.

15.3 Article Definitions

1. OSHA Hazard Communication Standard, Section 1910.1200(c)

SECTION 16 - OTHER INFORMATION

Energizer has prepared copyrighted Article Information Sheets to provide information on the different Eveready/Energizer/Rayovac battery systems. Batteries are articles as defined under the GHS and exempt from GHS classification criteria (Section 1.3.2.1.1 of the GHS). The information and recommendations set forth herein are made in good faith, for information only, and are believed to be accurate as of the date of preparation. However, ENERGIZER BRANDS, LLC MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS INFORMATION AND DISCLAIMS ALL LIABILITY FROM REFERENCE ON IT.

16.1 ACRONYM GLOSSARY

- 1. ANSI: American National Standards Institute
- 2. CPSC: Consumer Product Safety Commission
- 3. <u>CPSIA:</u> Consumer Product Safety Improvement Act
- 4. DTSC: Department of Toxic Substances Control
- 5. <u>EPA:</u> Environmental Protection Agency
- 6. FHSA: Federal Hazardous Substances Act
- 7. GHS: Globally Harmonized System for Hazard Communication
- 8. IEC: International Electrotechnical Commission
- 9. OSHA: Occupational Safety and Health Administration
- 10. RCRA: Resource Conservation and Recovery Act
- 11. SDS: Safety Data Sheet
- 12. SVHC: Substances of Very high Concern
- 13. TSCA: Toxic Substances Control Act