

**PURELL® Advanced Hand Sanitizer Fragrance Free Foam**

Version 1.0

SDS Number: 400000006041

Revision Date: 05/12/2022

**SECTION 1. IDENTIFICATION**

Product name : PURELL® Advanced Hand Sanitizer Fragrance Free 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 : Hand Sanitizer  
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. -  
No smoking.  
P233 Keep container tightly closed.



## PURELL® Advanced Hand Sanitizer Fragrance Free Foam

Version 1.0

SDS Number: 400000006041

Revision Date: 05/12/2022

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 for extinction.

**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	>= 60 - < 70
Isopropyl Alcohol	67-63-0	>= 1 - < 5

### 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.
In case of skin contact	: Wash with water and soap as a precaution. Get medical attention if irritation develops and persists.
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. Rinse mouth with water. Obtain medical attention.
Most important symptoms and effects, both acute and delayed	: Causes serious eye irritation.
Protection of first-aiders	: First Aid responders should pay attention to self-protection and use the recommended protective clothing



## PURELL® Advanced Hand Sanitizer Fragrance Free Foam

Version 1.0

SDS Number: 400000006041

Revision Date: 05/12/2022

### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Dry chemical  
Carbon dioxide (CO<sub>2</sub>)
- 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  
Silicon oxides
- Hazardous combustion products : Carbon oxides  
Silicon 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 : 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.  
Clean contaminated floors and objects thoroughly while observing environmental regulations.

### SECTION 7. HANDLING AND STORAGE

**PURELL® Advanced Hand Sanitizer Fragrance Free Foam**

Version 1.0

SDS Number: 400000006041

Revision Date: 05/12/2022

- 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 cool, 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/m <sup>3</sup>	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	OSHA Z-1
		STEL	1,000 ppm	ACGIH
Isopropyl Alcohol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m <sup>3</sup>	NIOSH REL
		ST	500 ppm 1,225 mg/m <sup>3</sup>	NIOSH REL
		TWA	400 ppm 980 mg/m <sup>3</sup>	OSHA Z-1

**Biological occupational exposure limits**

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Isopropyl Alcohol	67-63-0	Acetone	Urine	End of shift at end of workweek	40 mg/l	ACGIH BEI

**Personal protective equipment**

- Respiratory protection : No personal respiratory protective equipment normally required.
- Hand protection : No special protective equipment required.
- Remarks : No special protective equipment required.
- Eye protection : Wear face-shield and protective suit for abnormal processing problems.
- Skin and body protection : No special protective equipment required.
- 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.

**PURELL® Advanced Hand Sanitizer Fragrance Free Foam**

Version 1.0

SDS Number: 400000006041

Revision Date: 05/12/2022

Avoid contact with eyes.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	: liquid
Colour	: clear, colourless, yellow
Odour	: alcohol-like
pH	: 6 - 9
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: 73 °C
Flash point	: 26.00 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
Flammability (liquids)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 0.8738 g/cm <sup>3</sup>
Solubility(ies)	
Water solubility	: soluble
Partition coefficient: n-octanol/water	: Not applicable
Auto-ignition temperature	: not determined
Thermal decomposition	: The substance or mixture is not classified self-reactive.
Viscosity	
Viscosity, kinematic	: 10 - 20 mm <sup>2</sup> /s (20 °C)
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Molecular weight	: Not applicable

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air.

**PURELL® Advanced Hand Sanitizer Fragrance Free Foam**

Version 1.0

SDS Number: 400000006041

Revision Date: 05/12/2022

Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Strong oxidizing agents Flammable solids Water-reactive substances
Hazardous decomposition products	:	No hazardous decomposition products are known.

**SECTION 11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

Inhalation  
Skin contact  
Eye contact

**Acute toxicity**

Not classified based on available information.

**Product:**

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

**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

**Isopropyl Alcohol:**

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

Acute inhalation toxicity : LC50 (Rat): 72.6 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour

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

**Skin corrosion/irritation**

Not classified based on available information.

**Components:****Ethyl Alcohol:**

Species: Rabbit  
Method: OECD Test Guideline 404  
Result: No skin irritation

**Isopropyl Alcohol:**

Species: Rabbit  
Result: No skin irritation

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**PURELL® Advanced Hand Sanitizer Fragrance Free Foam**

Version 1.0

SDS Number: 400000006041

Revision Date: 05/12/2022

**Components:****Ethyl Alcohol:**

Species: Rabbit

Result: Irritation to eyes, reversing within 21 days

Method: OECD Test Guideline 405

**Isopropyl Alcohol:**

Species: Rabbit

Result: Irritation to eyes, reversing within 21 days

**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

**Isopropyl Alcohol:**

Test Type: Buehler Test

Exposure routes: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

Result: negative

**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: negativeGenotoxicity in vivo : Test Type: Rodent dominant lethal test (germ cell) (in vivo)  
Test species: Mouse  
Application Route: Ingestion  
Result: negative**Isopropyl Alcohol:**Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negativeGenotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo  
cytogenetic assay)  
Test species: Mouse  
Application Route: Intraperitoneal injection  
Result: negative**Carcinogenicity**

Not classified based on available information.


**PURELL® Advanced Hand Sanitizer Fragrance Free Foam**

Version 1.0

SDS Number: 400000006041

Revision Date: 05/12/2022

**Components:**
**Isopropyl Alcohol:**

Species: Rat  
 Application Route: inhalation (vapour)  
 Exposure time: 104 weeks  
 Method: OECD Test Guideline 451  
 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.

**OSHA**

No 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:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study  
 Species: Mouse  
 Application Route: Ingestion  
 Method: OECD Test Guideline 416  
 Result: negative

**Isopropyl Alcohol:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study  
 Species: Rat  
 Application Route: Ingestion  
 Result: negative

Effects on foetal development : Test Type: Embryo-foetal development  
 Species: Rat  
 Application Route: Ingestion  
 Result: negative

**STOT - single exposure**

Not classified based on available information.

**Components:**
**Isopropyl Alcohol:**

Assessment: May cause drowsiness or dizziness.

**STOT - repeated exposure**

Not classified based on available information.

**Repeated dose toxicity**
**Components:**


**PURELL® Advanced Hand Sanitizer Fragrance Free Foam**

Version 1.0

SDS Number: 400000006041

Revision Date: 05/12/2022

**Ethyl Alcohol:**

Species: Rat  
 NOAEL: 2,400 mg/kg  
 Application Route: Ingestion  
 Exposure time: 2 y

**Isopropyl Alcohol:**

Species: Rat  
 NOAEL: 5000 ppm  
 Application Route: inhalation (vapour)  
 Exposure time: 104 w  
 Method: OECD Test Guideline 413

**Aspiration toxicity**

Not classified based on available information.

---

**SECTION 12. ECOLOGICAL INFORMATION**
**Ecotoxicity****Components:****Ethyl Alcohol:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l  
 Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1,000 mg/l  
 Exposure time: 48 h

Toxicity to algae : EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l  
 Exposure time: 72 h  
 Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates : NOEC (Daphnia magna (Water flea)): 9.6 mg/l  
 Exposure time: 9 d  
 (Chronic toxicity)

Toxicity to bacteria : EC50 (Photobacterium phosphoreum): 32.1 mg/l  
 Exposure time: 0.25 h

**Isopropyl Alcohol:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 10,000 mg/l  
 Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l  
 Exposure time: 24 h

Toxicity to bacteria : EC50 (Pseudomonas putida): > 1,050 mg/l  
 Exposure time: 16 h

**Persistence and degradability****Components:****Ethyl Alcohol:**

Biodegradability : Result: Readily biodegradable.  
 Biodegradation: 84 %


**PURELL® Advanced Hand Sanitizer Fragrance Free Foam**

Version 1.0

SDS Number: 400000006041

Revision Date: 05/12/2022

Exposure time: 20 d

**Isopropyl Alcohol:**

Biodegradability : Result: rapidly degradable

**Bioaccumulative potential****Components:****Ethyl Alcohol:**

Partition coefficient: n-octanol/water : log Pow: -0.35

**Isopropyl Alcohol:**

Partition coefficient: n-octanol/water : log Pow: 0.05

**Mobility in soil**

No 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****IATA-DGR**

UN/ID No. : UN 1987  
 Proper shipping name : Alcohols, n.o.s.  
 (Ethanol, Propan-2-ol)  
 Class : 3  
 Packing group : III  
 Packing instruction (cargo aircraft) : 366  
 Packing instruction (passenger aircraft) : 355

**IMDG-Code**

UN number : UN 1987


**PURELL® Advanced Hand Sanitizer Fragrance Free Foam**

Version 1.0

SDS Number: 400000006041

Revision Date: 05/12/2022

Proper shipping name : ALCOHOLS, N.O.S.  
(Ethanol, Propan-2-ol)

Class : 3

Packing group : III

Labels : 3

EmS Code : F-E, S-D

Marine pollutant : no

**National Regulations**
**49 CFR**

UN/ID/NA number : UN 1987

Proper shipping name : Alcohols, n.o.s.

Class : 3

Packing group : III

ERG Code : 127

Marine pollutant : no

**SECTION 15. REGULATORY INFORMATION**
**EPCRA - Emergency Planning and Community Right-to-Know Act**

**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** : The following components are subject to reporting levels established by SARA Title III, Section 313:

Isopropyl Alcohol	67-63-0	3.4086 %
-------------------	---------	----------

**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 SOCM1

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

Ethyl Alcohol	64-17-5	65.2821 %
Isopropyl Alcohol	67-63-0	3.4086 %

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

**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

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


**PURELL® Advanced Hand Sanitizer Fragrance Free Foam**

Version 1.0

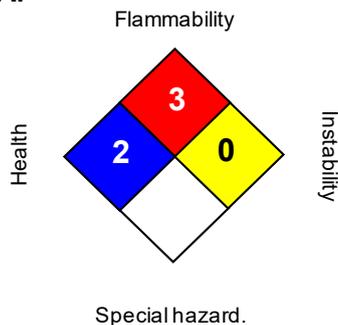
SDS Number: 400000006041

Revision Date: 05/12/2022

ISHL	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
NZIoC	: On the inventory, or in compliance 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:**

<b>HEALTH</b>	<b>2</b>
<b>FLAMMABILITY</b>	<b>3</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,  
 2 = Moderate, 3 = High  
 4 = Extreme, \* = Chronic

Revision Date : 05/12/2022

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.

**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**

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

**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.

**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.

**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

**SECTION 11 – TOXICOLOGICAL INFORMATION**

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

## 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

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

### 15.1 Battery

- 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
- EU Battery Directive 2006/66/EC Amended 2013/56/EU:** Energizer batteries are compliant with all aspects of the Directive

## Article Information Sheet/Safety Data Sheet

### **15.2 General**

1. **CPSIA 2008:** Exempt
2. **US CPSC FHSA (16 CFR 1500):** Not applicable since batteries are defined as articles
3. **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. [CPSIA](#): Consumer Product Safety Improvement Act
4. [DTSC](#): Department of Toxic Substances Control
5. [EPA](#): 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