Spectrum Brands, Inc. Rayovac Division 3001 Deming Way Middleton, WI 53562-1431 Phone: (608) 275-3340 Fax: (608) 275-4577 http://www.rayovac.com





SAFETY DATA SHEET

The Safety Data Sheet is supplied as a service to you. For other related information, please visit: <u>http://www.rayovac.com</u>

1. IDENTIFICATION

PRODUCT NAME:	Alkaline Battery Mercury Free
SIZES:	All sizes
EMERGENCY HOTLINE:	800-424-9300 (24 hr, Chemtrec)
EDITION DATE:	07/01/2017

2. HAZARD IDENTIFICATION

We would like to inform our customers that these batteries are exempt articles and are not subject to the 29 CFR 1910.1200 OSHA requirements, Canadian WHMIS requirements or GHS requirements.

Emergency Overview

OSHA Hazards-not applicable Target Organs-not applicable GHS Classification-not applicable GHS Label Elements, including precautionary Statement-not applicable Pictogram-not applicable Signal words-not applicable Hazard statements-not applicable Precautionary statements-not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS #	%	TLV*/**TWA	
Manganese Dioxide	1313-13-9	32-38	C5.0 mg/m ³	
Steel	7439-89-6	19-23		
Zinc	7440-66-6	11-16	5 mg/m ³ (as ZnO Fume)	
Potassium Hydroxide	1310-58-3	5-9	Solution Not Listed	
Graphite	7782-42-5	3-5	15 mppcf	
Barium Sulfate	7727-43-7	<5	15 mg/m ³	
Water, paper, plastic, other		Balance		
*Source: OSHA 29 CFR 1910.1000 Table Z-1, 2 or 3 11-01-2012				

4. FIRST AID INFORMATION

THRESHOLD LIMIT VALUE (TLV) AND SOURCE: EFFECTS OF OVEREXPOSURE:

None in normal use

NA

EMERGENCY FIRST AID PROCEDURES:

Skin and Eyes:

Do not pick up a shorting battery as it may cause a burn. Get immediate medical attention when eyes may have been exposed to battery contents from a ruptured battery. Wash skin with soap and water.

Swallowing:

If you or your doctor suspects that a battery has been ingested-for assistance in the US call the NATIONAL BATTERY INGESTION HOTLINE any time at (202) 625-3333: in Canada call 416-813-5900.

For more information, please visit:

http://www.nema.org/Policy/Environmental-Stewardship/Documents/batteryingest.pdf

5. FIRE FIGHTING MEASURES

FLASH POINT:	NA
LOWER (LEL):	NA
FLAMMABLE LIMITS IN AIR (%):	NA
UPPER (UEL):	NA
EXTINGUISHING MEDIA:	Use water, foam, or dry powder as
	appropriate.
AUTO-IGNITION:	NA

SPECIAL FIRE FIGHTING PROCEDURES: As with any fire, wear self-contained breathing apparatus to avoid inhalation of hazardous decomposition products (See section 2).

SPECIAL FIRE OR EXPLOSION HAZARDS: DO NOT RECHARGE. As a typical sealed battery they may rupture when exposed to excessive heat; this could result in the release of flammable or corrosive materials.

6. ACCIDENTAL RELEASE MEASURES

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 requirements.

7. HANDLING AND STORAGE

Store batteries in a dry place. Storing unpackaged cells together with other combustible materials could result in cell shorting and heat build-up. Do not recharge. Do not puncture or abuse.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

RESPIRATORY PROTECTION (SPECIFY TYPE):			
VENTILATION:	VENTILATION: Local Exhaust:		
	Mechanical (General):	NA	
	Special:	NA	
	Other:	NA	
PROTECTIVE GLOV	VES:	NA	
EYE PROTECTION:		NA	
OTHER PROTECTIVE CLOTHING:			

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point @ 760 mm Hg (°C):	NA	Percent Volatile by Volume (%):		NA
Vapor Pressure (mm Hg @ 25°C):	NA	Evaporation Rate (Butyl Acetate = 1): N		NA
Vapor Density (Air = 1):	NA	Physical State:		NA
Density (grams/cc):	NA	Solubility in Water (% by Weight):		NA
pH:	NA	Appearance and Odor: Geometric so		lid object

10. STABILITY AND REACTIVITY

STABLE OR UNSTABLE:	Stable
INCOMPATIBILITY (MATERIALS TO AVOID):	NA
HAZARDOUS DECOMPOSITION PRODUCTS:	NA
DECOMPOSITION TEMPERATURE (0°F):	NA
HAZARDOUS POLYMERIZATION:	Will Not Occur
CONDITIONS TO AVOID:	Avoid electrical shorting, puncturing or deforming

11. TOXICOLOGICAL INFORMATION

INGREDIENT NAME	CAS #	%	TLV*/**TWA
Manganese Dioxide	1313-13-9	32-38	C5.0 mg/m ³
Steel	7439-89-6	19-23	
Zinc	7440-66-6	11-16	5 mg/m ³ (as ZnO Fume)
Potassium Hydroxide	1310-58-3	5-9	Solution Not Listed
Graphite	7782-42-5	3-5	15 mppcf
Barium Sulfate	7727-43-7	<5	15 mg/m ³
Water, paper, plastic, other		Balance	

*Source: OSHA 29 CFR 1910.1000 Table Z-1, 2 or 3 11-01-2012

12. ECOLOGICAL INFORMATION

Consumers should dispose of discharged batteries through waste disposal services or legitimate collection outlets. 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.

13. DISPOSAL CONSIDERATIONS

Always comply with Federal, state or local requirements. All Rayovac Alkaline batteries have been tested per Federal hazardous waste testing requirements (TCLP). The TCLP tests show Rayovac alkaline batteries are not hazardous waste.

http://www.nema.org/Policy/Environmental-Stewardship/Documents/Companies%20Claiming%20to%20Recycle.MARCH2005.pdf

14. TRANSPORTATION INFORMATION

TRANSPORTATION-SHIPPING: Alkaline Batteries are considered dry-cell batteries and they are nondangerous goods for transportation. These batteries must be packed in a way to prevent short circuits or generation of a dangerous quantity of heat.

USDOT – See Special Provision 130.

IMO/Ocean – Not Listed.

ICAO/IATA – See Special Provision A123. This special provision also states to put the words "not restricted" and "special provision A123" on the air waybill when an air waybill is issued.

15. REGULATORY INFORMATION

SARA 313: Notification is not required because these products are article(s) that do not release a covered toxic chemical under the normal conditions of storage, use, or handling.

16. OTHER INFORMATION

The information and recommendations set forth are made in good faith and are believed to be accurate at the date of preparation. Spectrum Brands Inc. (Rayovac) makes no warranty expressed or implied.

Spectrum Brands, Inc. Rayovac Division 3001 Deming Way Middleton, WI 53562-1431 Phone: (608) 275-3340 Fax: (608) 275-4577 http://www.rayovac.com



SAFETY DATA SHEET

The Safety Data Sheet is supplied as a service to you. For other related information, please visit: <u>http://www.rayovac.com</u>

1. IDENTIFICATION

PRODUCT NAME:	Alkaline Battery Mercury Free
SIZES:	All sizes
EMERGENCY HOTLINE:	800-424-9300 (24 hr, Chemtrec)
EDITION DATE:	07/01/2017

2. HAZARD IDENTIFICATION

We would like to inform our customers that these batteries are exempt articles and are not subject to the 29 CFR 1910.1200 OSHA requirements, Canadian WHMIS requirements or GHS requirements.

Emergency Overview

OSHA Hazards-not applicable Target Organs-not applicable GHS Classification-not applicable GHS Label Elements, including precautionary Statement-not applicable Pictogram-not applicable Signal words-not applicable Hazard statements-not applicable Precautionary statements-not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS #	%	TLV*/**TWA	
Manganese Dioxide	1313-13-9	32-38	C5.0 mg/m ³	
Steel	7439-89-6	19-23		
Zinc	7440-66-6	11-16	5 mg/m ³ (as ZnO Fume)	
Potassium Hydroxide	1310-58-3	5-9	Solution Not Listed	
Graphite	7782-42-5	3-5	15 mppcf	
Barium Sulfate	7727-43-7	<5	15 mg/m ³	
Water, paper, plastic, other		Balance		
*Source: OSHA 29 CFR 1910.1000 Table Z-1, 2 or 3 11-01-2012				

4. FIRST AID INFORMATION

THRESHOLD LIMIT VALUE (TLV) AND SOURCE: EFFECTS OF OVEREXPOSURE:

None in normal use

NA

EMERGENCY FIRST AID PROCEDURES:

Skin and Eyes:

Do not pick up a shorting battery as it may cause a burn. Get immediate medical attention when eyes may have been exposed to battery contents from a ruptured battery. Wash skin with soap and water.

Swallowing:

If you or your doctor suspects that a battery has been ingested-for assistance in the US call the NATIONAL BATTERY INGESTION HOTLINE any time at (202) 625-3333: in Canada call 416-813-5900.

For more information, please visit:

http://www.nema.org/Policy/Environmental-Stewardship/Documents/batteryingest.pdf

5. FIRE FIGHTING MEASURES

FLASH POINT:	NA
LOWER (LEL):	NA
FLAMMABLE LIMITS IN AIR (%):	NA
UPPER (UEL):	NA
EXTINGUISHING MEDIA:	Use water, foam, or dry powder as
	appropriate.
AUTO-IGNITION:	NA

SPECIAL FIRE FIGHTING PROCEDURES: As with any fire, wear self-contained breathing apparatus to avoid inhalation of hazardous decomposition products (See section 2).

SPECIAL FIRE OR EXPLOSION HAZARDS: DO NOT RECHARGE. As a typical sealed battery they may rupture when exposed to excessive heat; this could result in the release of flammable or corrosive materials.

6. ACCIDENTAL RELEASE MEASURES

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 requirements.

7. HANDLING AND STORAGE

Store batteries in a dry place. Storing unpackaged cells together with other combustible materials could result in cell shorting and heat build-up. Do not recharge. Do not puncture or abuse.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

RESPIRATORY PROTECTION (SPECIFY TYPE):			
VENTILATION:	VENTILATION: Local Exhaust:		
	Mechanical (General):	NA	
	Special:	NA	
	Other:	NA	
PROTECTIVE GLOV	VES:	NA	
EYE PROTECTION:		NA	
OTHER PROTECTIVE CLOTHING:			

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point @ 760 mm Hg (°C):	NA	Percent Volatile by Volume (%):		NA
Vapor Pressure (mm Hg @ 25°C):	NA	Evaporation Rate (Butyl Acetate = 1): N		NA
Vapor Density (Air = 1):	NA	Physical State:		NA
Density (grams/cc):	NA	Solubility in Water (% by Weight):		NA
pH:	NA	Appearance and Odor: Geometric so		lid object

10. STABILITY AND REACTIVITY

STABLE OR UNSTABLE:	Stable
INCOMPATIBILITY (MATERIALS TO AVOID):	NA
HAZARDOUS DECOMPOSITION PRODUCTS:	NA
DECOMPOSITION TEMPERATURE (0°F):	NA
HAZARDOUS POLYMERIZATION:	Will Not Occur
CONDITIONS TO AVOID:	Avoid electrical shorting, puncturing or deforming

11. TOXICOLOGICAL INFORMATION

INGREDIENT NAME	CAS #	%	TLV*/**TWA
Manganese Dioxide	1313-13-9	32-38	C5.0 mg/m ³
Steel	7439-89-6	19-23	
Zinc	7440-66-6	11-16	5 mg/m ³ (as ZnO Fume)
Potassium Hydroxide	1310-58-3	5-9	Solution Not Listed
Graphite	7782-42-5	3-5	15 mppcf
Barium Sulfate	7727-43-7	<5	15 mg/m ³
Water, paper, plastic, other		Balance	

*Source: OSHA 29 CFR 1910.1000 Table Z-1, 2 or 3 11-01-2012

12. ECOLOGICAL INFORMATION

Consumers should dispose of discharged batteries through waste disposal services or legitimate collection outlets. 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.

13. DISPOSAL CONSIDERATIONS

Always comply with Federal, state or local requirements. All Rayovac Alkaline batteries have been tested per Federal hazardous waste testing requirements (TCLP). The TCLP tests show Rayovac alkaline batteries are not hazardous waste.

http://www.nema.org/Policy/Environmental-Stewardship/Documents/Companies%20Claiming%20to%20Recycle.MARCH2005.pdf

14. TRANSPORTATION INFORMATION

TRANSPORTATION-SHIPPING: Alkaline Batteries are considered dry-cell batteries and they are nondangerous goods for transportation. These batteries must be packed in a way to prevent short circuits or generation of a dangerous quantity of heat.

USDOT – See Special Provision 130.

IMO/Ocean – Not Listed.

ICAO/IATA – See Special Provision A123. This special provision also states to put the words "not restricted" and "special provision A123" on the air waybill when an air waybill is issued.

15. REGULATORY INFORMATION

SARA 313: Notification is not required because these products are article(s) that do not release a covered toxic chemical under the normal conditions of storage, use, or handling.

16. OTHER INFORMATION

The information and recommendations set forth are made in good faith and are believed to be accurate at the date of preparation. Spectrum Brands Inc. (Rayovac) makes no warranty expressed or implied.

SAFETY DATA SHEET

SECTION I : II	DENTIF	ICATION						
PRODUCT	ITP P.E. F	OAM PROFILES AN	ND EXTRU	ISIONS	MANUFACTURER NAME & ADDRESS:			
IDENTIFIER:	(WITH BLAC	CK PIGMENT)			INDUSTRIAL THERMO POLYME		MERS	
CHEMICAL	POLYETH				(Owned and Operated by Armacell Ca		rmacell Canada Inc.)	
IDENTITY:	_				153 VAN KIRK DRIVE			
RECOMMENDED		NG, CUSHIONING, SC		PENING,	BRAMPTON, ONTARIO , L7A			
USE	INSULATIO	DN,SEALING, FLOATA	TION etc.		PHONE NO.:		1-905-846-3666	
RESTRICTION OF	NONE				FAX NO.:		1-905-846-0363	
USE					EMERGENCY PHO	NE NO.:	1-800-387-3847	
		D(S) IDENTIFIC						
-	-				D BY OSHA AS "NO			
- PE FOAM PRODU	JCTS ARE	MADE FROM POLY	ETHYLEN	IE RESIN ,	ADDITIVES AND IS	OBUTANE	.(MORE DETAILS IN SEC.3.)	
- ISOBUTANE, A F	LAMABLE	HYDROCARBON IS	USED AS	BLOWIN	G AGENT.SMALL TF	RACES OF	THIS GAS MAY BE	
							S ABOVE THE LOWER	
FLAMMABLE LIMIT	S (LFL) IF	LARGE QUANTITIE	S OF THIS	S PRODUC	CT ARE STORED IN	UNVENTI	_ATED AREAS.	
ROUTES OF EXPOSURE:	SWALLO	WING SKIN ABS	SORBTION	1		SKIN COI	NTACT EYE CONTACT	
EFFECTS OF A SIN	IGLE (ACI		JRE BY:					
SWALLOWING:		CHOKING - MECHA		OCKAGE				
SKIN ABSORBTION	N:	NOT LIKELY.						
INHALATION:		FOAM DUST MAY	CAUSE RF	RITATION	TO NOSE ,THROAT	OR LUNG	S.	
SKIN CONTACT:		NON IRRITATING 1	O SKIN C	ONTACT				
EYE CONTACT:		EYE INJURY OR FO	DAM DUST	Г МАҮ СА	USE IRRITATION TO	DEYES		
OTHER EFFECTS		NOT KNOWN						
SECTION 3 : CO	MPOSITIO	ON / INFORMATIC	ON ON IN	GREDIE	NTS			
INGREDIEN	тѕ	CAS NO.	WEIGHT %		EXPOSURE LIMITS ACGIH - TLV*		-	
POLYETHYL	ENE	9002-88-4	75% -100%			NA		
ISOBUTAN	E	75-28-5		-		800 PPM TWA		
CARBON BL	ACK	1333-86-4	0% ·	- 5%		3.5 m	ıg/m³	
* Applicable provincial	TLV's may	differ						
* Specific chemical names and percentage in the mix has been withheld to protect trade secret.								
SECTION 4 : FIR	ST AID M	EASURES						
SWALLOWING:	<u>SKIN CONTACT:</u>							
CONSULT PHYSIC				VITH SOAP AND WATER				
INHALATION:		EYE CON						
BREATHING PROB	-	-		PHYSICI			M WATER. CONSULT	
SECTION 5 : FIRE FIGHTING MEASURES								
							RESULTS IN CLASS & FIRE	
1. PE FOAM IS COMBUSTIBLE AND SHOULD NOT BE EXPOSED TO SPARKS OR OPEN FLAME. RESULTS IN CLASS A FIRE.								

2. FIRE TO BE EXTINGUISHED BY USING WATER FOG OR FINE SPRAY. SOAK THE PRODUCT WITH WATER TO COOL AND SMOTHER.
3. FIRE WILL CAUSE DENSE SMOKE. USE SELF-CONTAINED BREATHING APPRATUS AND FULL PROTECTIVE CLOTHING.

4. FIRE WILL RESULT IN INTENSE HEAT AND SMOLDERING. EXTINGUISHMENT IS BY COOLING WITH WATER.

5. OTHER FIRE EXTINGUISHERS (DRY CHEMICAL, FOAM OR CO2 EXTINGUISHERS) MAY BE USED FOR EXTINGUISHMENT. 6. CHEMICAL/GASEOUS HAZARDS LIKE CO, CO2 AND CARBON MAY BE PRODUCED FROM THE SMOLDERING SUBSTANCES AND FIRE.

SAFETY DATA SHEET

SECTION 6: ACCIDENTAL RELEASE MEASURES

PE FOAM IS COMBUSTIBLE. SHOULD NOT BE EXPOSED TO SPARKS OR OPEN FLAME. RESULTS IN CLASS 'A' FIRE.

SECTION 7: HANDLING AND STORAGE

- PE FOAM IS COMBUSTIBLE AND SHOULD NOT BE EXPOSED TO SPARKS OR OPEN FLAME. WHEN BURNS, WILL RELEASE TOXIC GASES LIKE CO .

-WHEN FABRICATING OR CUTTING , THIS PRODUCT MAY RELEASE TRAPPED ISOBUTANE FROM THE FOAM CELLS. ADEQUATE VENTILATION IS A MUST.

- PE FOAM SHOULD BE STORED IN COOL, DRY AND WELL VENTILATED LOCATIONS. ISOBUTANE GAS MAY ACCUMULATE AROUND THE PRODUCT.

- PE FOAM IS INCOMPATIBLE WITH STRONG OXIDIZING AGENTS LIKE, CL2 ,H2O2 , KNO3 ,H2SO4.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

- NOT NECESSARY OTHER THAN STATED IN SECTION 2

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

SOLID	FREEZING POINT:	N/A	SPECIFIC GRAVITY VAPOUR	N/A
N/A	VAP. PRESS at 20°C:	N/A	MOLECULAR WEIGHT:	N/A
0.01 - 0.15	SOLUBILITY IN WATER	INSOLUBLE	COEFFICIENT OF WATER /	N/A
+ 212°F	EVAPORATION RATE	N/A	OIL DISTRIBUTION:	N/A
0-30 lbs/cuft	% VOLATILES BY VOLUME:	N/A	VAPOUR DENSITY	N/A
CLOSED CELL FOAM	ODOR:	NEGLIGIBLE	ODOR THRESHOLD:	N/A
	N/A 0.01 - 0.15 + 212°F 0-30 lbs/cuft	N/A VAP. PRESS at 20°C: 0.01 - 0.15 SOLUBILITY IN WATER + 212°F EVAPORATION RATE	N/A VAP. PRESS at 20°C: N/A 0.01 - 0.15 SOLUBILITY IN WATER INSOLUBLE + 212°F EVAPORATION RATE N/A 0-30 lbs/cuft % VOLATILES BY VOLUME: N/A	N/A VAP. PRESS at 20°C: N/A MOLECULAR WEIGHT: 0.01 - 0.15 SOLUBILITY IN WATER INSOLUBLE COEFFICIENT OF WATER / + 212°F EVAPORATION RATE N/A OIL DISTRIBUTION: 0-30 lbs/cuft % VOLATILES BY VOLUME: N/A VAPOUR DENSITY

SECTION 10 : STABILITY AND REACTIVITY

- PE FOAM IS STABLE AND NON-REACTIVE. OTHER THAN CONDITIONS STATED IN SECTION 5 ,6 & 7

SECTION 11 : TOXICOLOGICAL INFORMATION

- PE FOAM HAS NO CARCINGENIC SUBSTANCES. IT IS NOT LISTED IN : IARC & NTP

ROUTES OF EXPOSURE : SWALLOWING FOAM DUST INHALATION SKIN CONTACT EYE CONTACT EFFECTS OF ABOVE EXPOSURE STATED IN SECTION 4

SECTION 12 : ECOLOGICAL INFORMATION

- PE FOAM DOES NOT EXHIBIT ANY SIGNIFICANT BIODEGRADATION.

SECTION 13 : DISPOSAL CONSIDERATIONS

- PE FOAM CAN BE REPROCESSED OR CAN BE DISPOSED OFF IN LANDFILL

SECTION 14 : TRANSPORT INFORMATION

- PE FOAM HAS SOME RESIDUAL ISOBUTANE AND HENCE TO BE TRANSPORTED IN VENTILATED TRAILERS.

SECTION 15 : REGULATORY INFORMATION

- PE FOAM HAS NO CARCINGENIC SUBSTANCES AND IS CLASSIFIED AS NON HAZARDOUS UNDER THE FEDERAL OSHA STANDARDS.

SECTION 16 : OTHER INFORMATION

PREPARED BY / DEPARTMENT	PHONE NUMBER	DATE UPDATED	
HARENDRA RATHOD / QA DEPARTMENT	905-846-36660 / 1-800-387-3847	April 16, 2015	

FOR INFORMATION : Visit Web: www.tundrafoam.com or Email: info@tundrafoam.com