Ascent Battery Supply, LLC
1325 Walnut Ridge Drive
Hartland, Wisconsin 53029

Safety Data Sheet (SDS) — ALKALINE BATTERIES

The information and recommendations below are believed to be accurate at the date of document preparation. Ascent Battery Supply makes no warranty or merchantability or any other warranty, express or implied, with respect to this information and assumes no liability resulting from its use. This SDS provides guidelines for safe use and handling of product. It does not, and cannot, advise all possible situations. All specific uses of this product must be evaluated by the end user to determine if additional safety precautions should be taken.

SECTION 1 – IDENTIFICATION

Product Name	Alkaline Batteries – Mercury Free
Common Name(s)	Alkaline
Synonyms	Primary Battery
DOT Description	Dry Battery
Chemical Name	Manganese Dioxide
Distributed By	Ascent Battery Supply, LLC
Address	1325 Walnut Ridge Drive, Hartland, WI 53029
Emergency number	CHEMTREC 1-800-424-9300
International Emergency Number	CHEMTREC +1 703-741-5970 (Collect)

SECTION 2 – HAZARD(S)

GHS Classification: NA
Signal Word: NA
Hazard Classification: NA

Cells may rupture when exposed to excessive heat, which may result in the release of flammable or corrosive materials.

SECTION 3 – COMPOSITION

Chemical Name	CAS No.	Percentage %
Manganese Dioxide	1313-13-9	32-40
Stainless Steel	7439-89-6	20-23
Zinc	7440-66-6	11-18
Potassium Hydroxide	1310-58-3	5-9
Water	7732-18-5	0-9
Graphite	7782-42-5	0-5
Barium Sulfate	7727-43-7	0-5

SECTION 4 – FIRST AID MEASURES

Inhalation	Get fresh air. If symptoms persist seek medical attention.
Eyes Contact	If exposed to internal battery content, flush with copious quantities of flowing lukewarm water for a minimum of 15 minutes; get immediate medical attention.
Skin Contact	If exposed to internal battery content, flush with copious quantities of flowing lukewarm water for a minimum of 15 minutes; wash with soap and water.
Ingestion	Do not induce vomiting. Ingestion of battery chemicals can be harmful. Seek medical attention immediately. Call The National Battery Ingestion Hotline (202-625-3333) 24 hours a day, for procedures treating ingestion of chemicals.

SECTION 5 – FIRE-FIGHTING MEASURES

Flash Point – N/A

Auto Ingestion – No Data Available

Extinguisher Media - Use water, foam or dry powder.

Special Fire-Fighting Procedures - Wear self-contained breathing apparatus to avoid inhalation of hazardous decomposition products.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

In case of accidental rupture or release: prevent skin and eye contact and collect all released material in a plastic lined metal container. Leaking batteries should be handled with gloves. Wear protective clothing. Use a self-contained breathing apparatus if in the presence of chemical vapor. See also: sections 4, 5, and 8.

SECTION 7 – HANDLING AND STORAGE

Handling – Do not disassemble. Do not short circuit. 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.

Storage - Store batteries under roof in ambient temperature, dry, well-ventilated areas separated from incompatible materials and from activities that may create flames, spark or heat. Do not store unpacked cells together: avoid cells shorting to one another. Do not mix new and used batteries. Keep away from metallic objects that could bridge the terminals on a battery and create a dangerous short-circuit. If packing materials are not available, place tape on the positive (+) and negative (-) ends of the cells.

Charging – Do not attempt to recharge a primary battery.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation Requirements – Not necessary under normal conditions.

Respiratory Protection (NIOSH/MSHA approved) - None required under normal handling conditions.

Eye Protection – Always wear safety glasses while working with battery cells.

Skin Protection – Not necessary under normal conditions. Wear gloves if cell is ruptured, corroded, or leaking materials.

SECTION 9 – PHYSICAL/CHEMICAL PROPERTIES

Boiling Point	NA	**Melting Point**	NA
Vapor Pressure	NA	**Vapor Density**	NA
Specific Gravity (H2O=1)	NA	**Solubility in Water**	NA
Evaporation Rate	NA	**pH**	NA
Reactivity in Water	N/A	**Auto-Ignition Temperature**	NA
Lower Explosive Limit (LEL)	NA	**Upper Explosive Limit (UEL)**	NA
Odor Threshold	NA	**Viscosity (poise @ 25° C)**	NA
Partition Coefficient	NA	**Decomposition Temperature**	NA
Flash Point	NA	**Percent Volatile by Volume**	N/A
Appearance and Odor	Geometric, solid object	**Flammable Limits in Air, by vol.**	N/A

SECTION 10 – STABILITY & REACTIVITY

Stability - Avoid electrically shorting the cell. Under normal conditions this product is stable and will not decompose.

Incompatibility (materials to avoid) – NA

SECTION 11 – TOXICOLOGICAL INFORMATION

ROUTES AND METHODS OF ENTRY - Skin, Eyes, Ingestion (swallowing).

SIGNS AND SYMPTOMS OF OVEREXPOSURE – None. (In fire or rupture, refer to sections 4, 5, and 8).

MEDICAL CONDITIONS GENERALLY CAUSED BY EXPOSURE - Chemicals may cause burns to skin, eyes, gastrointestinal tract and mucous membranes.

THRESHOLD LIMIT VALUE – N/A

SECTION 12 – ECOLOGICAL INFORMATION

Hazardous Decomposition Products – NA

Hazardous Polymerization – Will not occur

Under normal use these batteries do not release internal ingredients into the environment. Damaged or abused batteries may release small amounts of zinc, manganese, and potassium hydroxide. Do not carelessly discard, as small amounts of zinc may be released into storm or surface water. Do not discard batteries into a fire. Dispose of properly or recycle.

SECTION 13 – DISPOSAL

Waste Disposal Method - Dispose of properly or recycle in accordance with all Federal, State and local laws and regulations.

SECTION 14 – TRANSPORT

Alkaline Batteries are considered dry-cell batteries and are not considered 'hazardous' or 'dangerous' goods for transportation. These batteries must be packed in a way to prevent short circuits or generation of a dangerous quantity of heat.

SECTION 15 – REGULATORY INFORMATION

IATA/ICAO: Not considered to be 'dangerous goods' when packaged properly.

DOT: Not considered to be a 'hazardous material'.

SECTION 16 – OTHER INFORMATION

None.