SAFETY DATA SHEET

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1. CHEMICAL PRODUCT AND COMPANY INDENTIFICATION

NAME: Alkaline 9V battery

MODEL: 9V

RATING: 550mAh, 9.0V, 4.95Wh

SUPPLIER: Wilmar LLC

20413 59th Pl S. Suite 160

Kent, WA 98032

USA

TELEPHONE: (800) 426-1262, (425) 970-6970

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2. HAZARDS IDENTIFICATION

Not dangerous with normal use. Do not dismantle, open or shred the battery ingredients contained within or their ingredients products could be harmful.

GHS CLASSIFICATION: Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

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3. COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Concentration or concentration ranges (%)
Manganese Dioxide (MnO_2)	1313-13-9	33.1
Zinc (Zn)	7440-66-6	12.8
Water (H_2O)	7732-18-5	6.1
Potassium Hydroxide (KOH)	1310-58-3	1.5
Graphite	7782-42-5	1.8
Brass	12597-71-6	4.3
Steel	7439-89-6	26.8
Ni-plating	7440-02-0	0.3
Nylon-66	None	1.3
Fiber	None	1.2
PBT plastic	26062-94-2	10.8

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4. FIRST AID MEASURES

GENERAL ADVICE: Remove contaminated clothing and shoes. If symptoms persist, call a physician.

INHALATION: Remove victims to fresh air and keep at rest in a comfortable breathing position. Call the NATIONAL BATTERY INGESTION HOTLINE for advice and follow up at (800-498-8666) day or night.

SKIN CONTACT: If exposed to a leaking battery, remove contaminated clothing. Wash exposed areas with plenty of water and soap. If irritation occurs, consult a physician.

EYE CONTACT: If a battery is leaking and materials contact eyes, flush immediately with running water for at least 15 minutes. Consult an ophthalmologist at once

INGESTION: Not anticipated due to size of batteries. Choking may occur with the smaller size batteries. If exposed to a leaking battery, rinse mouth and surrounding areas with running water for at least 15 minutes. Give plenty of water to drink. Do not induce vomiting. Obtain medical advice.

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5. FIRE FIGHTING MEASURES

CHARACTERISTICS OF HAZARD: In case of fire, carbon dioxide, carbon monoxide and other toxic organic substances will be generated. Do not inhale fumes and smoke.

FIRE-EXTINGUISHING METHODS AND EXTINGUISHING MEDIA: Carbon dioxide (CO2), foam, dry chemical powder. Never use a direct water jet.

PROTECTION FOR FIRE FIGHTERS AND OTHERS: Responders should wear self-contained breathing apparatuses and full fire-fighting suits. Prevent contact with skin and eyes. Do not extinguish from a position down wind of the fire. Evacuate those who are not responding.

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6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Notify safety personnel of large spills. Caustic potassium hydroxide may be released from leaking or ruptured batteries. Avoid eye or skin contact and inhalation of vapours. Increase the ventilation. Wear protective clothing. Keep unprotected persons away.

PRECAUTIONS TO PROTECT THE ENVIRONMENT: Avoid discharge and penetration into sewerage systems, waterways, pits, and cellars.

SPILL CLEAN-UP PROCEDURES: Take all the precautions listed in this document. Use water mixed with abluent to clean up the contaminated area. Use absorbent. Avoid contact with eyes or skin. Avoid discharge into all sorts of waterways.

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7. HANDLING AND STORAGE

HANDLING: Obey the common known rules and precautions for handling with chemicals. Avoid mechanical and electrical abuse. Do not short

battery or install incorrectly. Batteries may explode, pyrolize or vent if disassembled, crushed, recharged or exposed to high temperatures. Install batteries according to equipment instructions. Do not mix battery systems, such as alkaline and zinc- carbon. Replace all batteries in equipment at the same time. Do not carry batteries loose in pocket or bag. Do not remove battery labels.

STORAGE CONDITIONS: Store product in well-filled, appropriate coated and tightly closed containers avoiding influence of oxygen/air, light and humidity. Storage at room temperature

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8. EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE / TECHNICAL MEASURES: Atmospheric vapour concentrations must be minimized by adequate ventilation

PERSONAL PROTECTIVE EQUIPMENT: None required under normal use conditions. When handling leaking batteries, use neoprene, rubber or nitrile gloves and wear safety glasses to protect hands, eyes and skin.

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9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Stainless steel top battery

COLOR: Contents gray

FORM: Rectangular solid

ODOR: Odorless

SOLUBILITY: Insoluble

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10. STABILITY AND REACTIVITY

STABILITY: Stable under normal temperatures and pressures.

CONDITIONS TO AVOID: Strong oxidation agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Batteries may burst and release hazardous decomposition products when exposed to fireContents incompatible with strong oxidizing agents.

POSSIBILITY OF HAZARDOUS REACTION: Thermal degradation may produce hazardous fumes of zinc and manganese; hydrogen gas; caustic vapors of potassium hydroxide and other toxic by-product.

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11. TOXICOLOGICAL INFORMATION

INHALATION: N/A

SKIN: N/A

INGESTION: Ingestion of a battery can be harmful

HEALTH HAZARD / TOXICOLOGICAL INFORMATION: There is no toxicity data for Battery. The battery is nontoxic because the chemical mixture from battery is sealed by the metal container.

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12. ECOLOGICAL INFORMATION

PERSISTENCE/DEGRADABILITY: Since a battery cell and the internal materials remain in the environment, do not bury or throw out into the environment.

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13. DISPOSAL CONSIDERATIONS

PRODUCT: Dispose in accordance with appropriate regulations. If in doubt, contact your local government office concerned for information. Do not incinerate, since batteries may explode at excessive temperatures. Recommended methods for safe and environmentally preferred disposal:

Product (waste from residues):

(1) Dispose of in a manner consistent with regulations. Below some references: European Community: The removed batteries have to be treated according to the Battery directive 2006/66/EC

(2) For safety purpose, insulation measures are need to avoid heat or rupture caused by short-circuit, such as film on terminals, insulation bag or original package for packing.

CONTAMINATED PACKAGING: Neither a container nor packing is contaminated during normal use. When internal materials leaked from a battery cell contaminates them, dispose them as industrial wastes subject to special control.

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14. TRANSPORT INFORMATION

UN NUMBER: N/A

UN PROPER SHIPPING NAME: N/A

“Dry cell” batteries and are unregulated for purposes of transportation by the U.S. Department of Transportation (DOT), International Civil Aviation Administration (ICAO), International Air Transport Association (IATA) Dangerous Goods Regulations 58th edition and International Maritime Dangerous Goods Regulations (IMDG). The only DOT requirement for shipping these batteries is special provision 130 which states: “Batteries, dry are not subject to the requirements of this subchapter only when they are offered for transportation in a

manner that prevents the dangerous evolution of heat (For example, by the effective insulation of exposed terminals). The only requirements for shipping these batteries by ICAO and IATA is Special Provision A123 which states: "An electrical battery or battery powered device having the potential of dangerous evolutions of heat that is not prepared so as to prevent a short-circuit (e.g. in the case of batteries, by the effective insulation of exposed terminals; or in the case of equipment, by disconnection of the battery and protection of exposed terminals) is forbidden from transportation." The international Maritime Dangerous Goods Code (IMDG) does not regulate such type of batteries. IMDG only regulate those batteries containing dry potassium hydroxide for ocean transportation under Special Provision 304 which says: “This entry may only be used for the transport of non-activated batteries which contain dry potassium hydroxide and which are intended to be activated prior to use by the addition of an appropriate amount of water to the individual cells.” The Batteries, dry, do not containing dry potassium hydroxide are not subject to the provision of this Code provided the batteries are securely packed and protected against short-circuits. Example of such batteries is: alkali-manganese, zinc-carbon, and nickel-cadmium batteries. Non-dangerous goods. Such battery has been packed in inner packaging in such a manner as to effectively prevent short circuit and movement that could lead to short circuitDOT **/ IMDG / IATA**

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15. REGULATORY INFORMATION

Remark: “N.A.” is indicated if not applicable.

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16. OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no

warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their purposes.

Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation. This safety data sheet provides guidelines for the safe handling and use of this product; it does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required.