

Material Safety Data Sheet

Manufacture	RAYOVAC CORPORATION	Identity (as used on label)	HEAVY DUTY - GENERAL PURPOSE BATTERIES
Address	P.O. BOX 4960 MADISON, WI 53711-0960	Non-emergency Phone	(608) 275-4856
Date Prepared	November 1, 1990	Emergency Phone	OR (608) 275-4739

HMIS Rating Health Flammability Reactivity Personal Protection

SECTION I - MATERIAL IDENTIFICATION AND INFORMATION

Components - Chemical Name & Common Names (Hazardous components 1% or greater; Carcinogens 0.1% or greater)	%	OSHA PEL	ACGIH TLV	Other
MANGANESE DIOXIDE	28-32		5.0 mg/M	
ZINC	16-20		124.0 mg/M	
CARBON	7-13		3.5 mg/M	
ZINC CHLORIDE	6-10		1.0 mg/M	
LEAD	<0.2		0.15 mg/M	
CADMIUM	<0.005		0.05 mg/M	
MERCURY	< .0001 (background trace)		0.05 mg/M	

Total

SECTION II - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point	N/A	Specific Gravity (H ₂ O = 1)	N/A
Vapor Pressure	N/A	Melting Point	N/A
Vapor Density (Air = 1)	N/A	Evaporation Rate (= 1)	N/A
Solubility in Water	N/A	Water Reactive	N/A
Appearance and Odor	N/A		

SECTION III - FIRE AND EXPLOSION HAZARD DATA

Flash point and Method Used	N/A	Auto-Ignition Temperature	Flammability Limits in Air % by Volume
UEL	N/A		N/A

Extinguisher Media IN BULK STORAGE AREAS, USE FORM OR DRY POWDER. WATER MAY CAUSE ELECTRICAL SHORTS.

Special Fire Fighting Procedures AS IN ANY FIRE IN BULK STORAGE AREAS, WEAR SELF-CONTAINED BREATHING APPARATUS TO AVOID INHALATION OF HAZARDOUS DECOMPOSITION PRODUCTS.

Unusual Fire and Explosion Hazards LIKE ANY SEALED CONTAINER, BATTERY CELLS MAY RUPTURE WHEN EXPOSED TO EXCESSIVE HEAT; this could result in the release of corrosive materials.

SECTION IV - REACTIVITY HAZARD DATA

Stability STABLE

Conditions To Avoid N/A

Incompatibility (Materials to Avoid) N/A

Hazardous Decomposition Products OXIDES OR FUMES OF Mn, Zn, Hg, Pb, Cd and Sn.

Hazardous Polymerization WILL NOT OCCUR

Conditions To Avoid AVOID ELECTRICAL SHORTING

SECTION V - HEALTH HAZARD DATA

Primary Routes of Entry	Inhalation	Ingestion	Absorption	Injection	Not Hazardous
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Carcinogen

Acute Health Hazard

Chronic Health Hazard

Signs and Symptoms of Exposure

Medical Conditions Generally Aggravated by Exposure

Emergency First-Aid Procedures
 Eye Contact SKIN & EYES: In the event that battery ruptures, flush with copious quantities of water. Get immediate medical attention for eyes.

Skin Contact Wash with soap and water.

Inhalation

Ingestion

SECTION VI - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (Specify Type) AS IN A FIRE SITUATION, USE SELF-CONTAINED BREATHING APPARATUS.

Protective Gloves (Specify Type) N/A

Eye Protection N/A

Ventilation To Be Used N/A Local Exhaust Mechanical (general) Special Other (specify)

Other Protective Clothing and Equipment N/A

Hygienic Work Practices N/A

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE / LEAK PROCEDURES

Steps To Be Taken If Material Is Spilled Or Released IN THE EVENT OF BATTERY RUPTURE, COLLECT ALL RELEASED MATERIAL IN PLASTIC BAG FOR WASTE DISPOSAL.

Waste Disposal Methods WHEN SHREDDED PER TOXICITY CHARACTERISTIC LESCHATE PROCEDURE PARAMETERS AND TESTED PER SW 846, 3rd Edition, "TEST METHODS FOR EVALUATING SOLID WASTE" INDEPENDENT CERTIFIED LABORATORY ANALYSES HAVE INDICATED THESE RAYOVAC BATTERY TYPES TO HAVE NO HAZARDOUS CHARACTERISTICS (PER 40 CFR, PART 261.24).

Precautions To Be Taken in Handling and Storage

Other Precaution and/or Special Hazards