

## Material Safety Data Sheet for GP 9V Carbon Zinc & Zinc Chloride Batteries

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IDENTITY (As Used on Label and List)	Note: Blank spaces are not permitted if any item is not a			
Carbon Zinc batteries information is available, the space must be marked to indicate that.  Section 1- Identification				
Manufacturer's Name GPI International Ltd.	Emergency Telephone Number			
Address ( Number, Street, City State, and ZIP Code) Existing Address:  8/F., GP Building, 30 Kwai Wing Road,	Telephone Number for information 852-2484-3333			
Kwai Chung, N.T., HK.  New Address (effective on 24-Jan-2016):  7/F., Building 16W, 16 Science Park West Avenue, Hong Kong Science Park, N.T., HK	Date of prepared and revision Jan 1, 2016			
	Signature of Prepare (optional)			

#### Section 2 - Hazards Identification

Classification:

N.A.

Section 3 – Composition/Information On Ingredients						
Hazardous Components:						
Description:	Approximate % of total weight	CAS No.	Remark			
Zinc Chloride (ZnCl <sub>2</sub> )	2-10 Wt%	7646-85-7				
Ammonium Chloride (NH <sub>4</sub> Cl)	0-10 Wt%	12125-02-9				
Manganese Dioxide (MnO <sub>2</sub> )	25-35 Wt%	1313-13-9				
Zinc (Zn)	10-20 Wt%	7440-66-6				
Acetylene Black	5-15 Wt%	7440-44-0				

## Section 4 - First Aid Measures

First Aid Procedures

If electrolyte leakage occurs and makes contact with skin, wash with plenty of water immediately.

If electrolyte comes into contact with eyes, wash with copious amounts of water for fifteen (15) minutes, and contact a physician.

If electrolyte vapors are inhaled, provide fresh air and seek medical attention if respiratory irritation develops. Ventilate the contaminated area.



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Document Number: MWW 001 Revision:16 Page 2 of 4 **Section 5 – Fire-Fighting Measures** Flash Point (Method Used) Ignition Temp. Flammable Limits LEL UEL N.A. N.A. N.A. N.A. N.A. Extinguishing Media Carbon Dioxide, Dry Chemical or Foam extinguishers Special Fire Fighting Procedures N.A. Unusual Fire and Explosion Hazards Do not dispose of battery in fire - may explode. Do not short-circuit battery - may cause burns. Section 6 - Accidental Release Measures Steps to Be Taken in Case Material is Released or Spilled Batteries that are leakage should be handled with rubber gloves. Avoid direct contact with electrolyte. Wear protective clothing and a positive pressure Self-Contained Breathing Apparatus (SCBA). Section 7 – Handling and Storage Safe handling and storage advice Batteries should be handled and stored carefully to avoid short circuits. Do not store in disorderly fashion, or allow metal objects to be mixed with stored batteries. Never disassemble a battery. Do not breathe cell vapors or touch internal material with bare hands. The cells and batteries shall not be stored in high temperature, the maximum temperature allowed is 60°C for a

short period during the shipment, Otherwise the cells maybe leakage and can result in shortened service life..



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Оссиранона	•	.A.	N.A.	
Dogminotomy I	Protection (Specify Ty		IV.A.	
Respiratory I		-		
**		V.A.	la	
Ventilation Local Exhausts  N.A.  Mechanical (General)  N.A.			Special	
			N.A.	
			Other	
		N.A.	N.A.	
Protective Gloves			Eye Protection	
N.A.			N.A.	
Other Protec	tive Clothing or Equip	ment		
	N.A.			
Work / Hygie	enic Practices			
	N.A.			
Section 9	- Physical / Che	mical	Properties	
Boiling Point		mour	Specific Gravity (H <sub>2</sub> O=1)	
Van an Dua ann	N.A.		N.A.	
Vapor Pressure (mm Hg) N.A.			Melting Point N.A.	
Vapor Density (AIR=1)			Evaporation Rate (Butyl Acetate)	
Solubility in	N.A. Water		N.A.	
Solubility in	N.A.			
Appearance a	and Odor		Destruction for Characteristics	
			Rectangular Shape, odorless	
Section 1	0 – Stability and	React		
Stability	Unstable		Conditions to Avoid	
	Stable			
		X		
Incompatibili	ty (Materials to Avoid	)		
Hazardous De	ecomposition or Bypro	ducts		
Hazardous Polymerizati on	May Occur		Conditions to Avoid	
	Will Not Occur	X		
VIII to our feronse				



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#### Section 11 – Toxicological Information

Route(s) of Entry Inhalation? N.A. Skin? N.A. Ingestion? N.A.

Health Hazard (Acute and Chronic) / Toxiclogical information

In case of electrolyte leakage, skin will be itchy when contaminated with electrolyte.

In contact with electrolyte can cause severe irritation and chemical burns.

Inhalation of electrolyte vapors may cause irritation of the upper respiratory tract and lungs.

#### **Section 12 – Ecological Information**

N.A.

#### **Section 13 – Disposal Considerations**

Dispose of batteries according to government regulations.

## Section 14 - Transportation 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 GP carbon zinc batteries has been designed to be compliant with these regulatory concerns.

Carbon Zinc 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 57th edition, 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 GP carbon zinc 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.

#### Section 15 - Regulatory Information

Special requirement be according to the local regulatories.

#### Section 16 - Other Information

The data in this Material Safety Data Sheet relates only to the specific material designated herein.

#### Section 17 - Measures for fire extinction

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.

