

Document Number: Revision: 00 Page 1 of 4

IDENTITY (As Used on Label and List)	Note: Blank spaces are not permitted if any item is not applicable or no information is available, the space must be marked to indicate that.
Section I – Information of Ma	nufacturer
Manufacturer's Name GPI International Ltd.	Emergency Telephone Number
Address (Number, Street, City State, and ZIP Code) 8/F GP Building, 30 Kwai Wing Road,	Telephone Number for information 852-2484-3333
Kwai Chung, N.T. H.K.	Date of prepared and revision Mar 22, 2004
	Signature of Preparer (optional)
	1
Section II - Hazardous Ingred	lients / Identity Information
Hazardous Components:	

Hazardous Components:						
Description:	Approximate % of total weight					
Mercury	0.1 - 0.3	Wt%				
Lead	0.001 - 0.003	Wt%				
Zinc	3 – 10	Wt%				
Manganese Dioxide	10 – 30	Wt%				
KOH/NaOH solution	5 _ 11	W/t%				

	Chemical Characteristics				
Boiling Point	Specific Gravity (H ₂ O=1)				
N.A.	N.A.				
Vapor Pressure (mm Hg)	Melting Point				
N.A.	N.A.				
Vapor Density (AIR=1)	Evaporation Rate (Butyl Acetate)				
N.A.	N.A.				
Solubility in Water					
N.A.					
Appearance and Odor					
button or cylindrical shape, odorless					

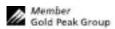
Section IV - Hazard Classification

Classification

N.A.

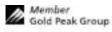


Document Number:				Revision: 00			Page 2 of 4	
Section V	Reactivit	y Data						
Stability	Unstable		Conditio	ns to Avoid				
	Stable	X						
Incompatibility (Materials to Avoi	d)						
Hazardous Deco	mposition or Bypr	oducts	CKO	HALOH 1H				
Hazardous	May Occur	mit hazardous vap		ns to Avoid				
Polymerization	Way occur		Conditio	ns to rivola				
	Will Not Occur	X						
	'	+	-!					
Section VI	- Health H	azard Data						
Route(s) of		Inhalation?		Skin?		Ingestic	n?	
Entry			N.,	A.		N.A.		N.A.
Health Hazar	d (Acute and (Chronic) / Toxi	cologica	l information				
Tiourni Tiuzur	a (France and C	omome), rom	corogreu	1 1111011111111111				
In case of	of electrolyte leak	age, skin will be ito	chy when o	contaminated with elec	ctrolyte.			
In conta	ct with electrolyte	can cause severe	irritation a	nd chemical burns.				
Inhalatio	on of electrolyte v	apors may cause ir	ritation of	the upper respiratory	tract and	l lungs.		
Section VI	I – First Aid	d Measures	}					
First Aid Prod								
If electro	olyte leakage occi	irs and makes cont	act with sk	in, wash with plenty of	of water	immediately.		
If electro	olyte comes into c	ontact with eyes, v	vash with	copious amounts of wa	ater for	fifteen (15) minutes, and	contac	t a physician.
If electro	olyte vapors are ir	haled, provide free	sh air and s	seek medical attention	if respi	ratory irritation develops	s. Venti	late the contaminated area.
Section VI	II - Fire and	d Explosion	Haza	rd Data				
Flash Point (Met		Ignition Temp.		Flammable Limits		LEL	U	EL
N.	.A.	N.A.		N.A.		N.A.		N.A.
Extinguishing M	edia							
	•	mical or Foam exti	inguishers					
Special Fire Figh	nting Procedures							
N.A.								
	l Explosion Hazar							
		in fire - may explo						
Do not s	short-circuit batter	y - may cause burr	ıs.					





Document Number:		Revision: 00	Page 3 of 4
Section IX	X – Accidental Release or	Spillage	
Steps to Be	Taken in Case Material is Released	l or Spilled	
Batte	eries that are leaking should be handled with	n rubber gloves.	
Avoi	d direct contact with electrolyte.		
Wear	r protective clothing and a positive pressure	Self-Contained Breathing Apparatus (SCBA).	
	C – Handling and Storage		
Safe handlin	g and storage advice		
The	e battery is extremely sensitive to adverse e	ffects of humidity. Be sure to store them in a place which	is dry and subject to little temperature
cha	ange. Do not place near the boiler or radia	tor, nor expose to direct sun light. Do not dispose of the b	pattery in fire. Do not charge the battery.
Do	not short-circuit the battery. Do not put i	n backward position. Do not store in disorderly fashion, o	or allow metal objects to be mixed with
sto	red batteries. Do not disassemble the batt	ery, handling in such manner can cause the battery to explo	se, leak and injury.
Section X	(I – Exposure Controls / Pe	erson Protection	
	xposure Limits: LTEP	STEP	
	N.A.	N.A.	
Respiratory Pro	stection (Specify Type)		
	N.A.	1	
Ventilation	Local Exhausts	Special	
	N.A. Mechanical (General)	N.A. Other	
	N.A.	N.A.	
Protective Glov		Eye Protection	
	N.A.	N.A.	
Other Protective	e Clothing or Equipment		
	N.A.		
Work / Hygieni	c Practices		
	N.A.		
Section X	(II – Ecological Information	1	
	N.A.		
Section X	(III - Disposal Method		
Dispose	of batteries according to government regula	ations.	





Document Number: Revision: 00 Page 4 of 4

Section XIV – Transportation Information

GP batteries are considered to be "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) 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). As of 1/1/97 IATA requires that batteries being transported by air must be protected from short-circuiting and protected from movement that could lead to short-circuiting.

Section XV – Regulatory Information

Special requirement be according to the local regulatories.

Section XVI - Other Information

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

Section XVII – 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.