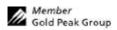


GP Batteries

Material Safety Data Sheet for All NiCd cells

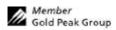
Document Number:	Revision: 00	Page 1 of 4				
IDENTITY (As Used on Label and List)	Note: Blank spaces are not permitted if any item is not applicable or no information is available, the space must be marked to indicate that.					
Section I - Information of Ma	anufacturer					
Manufacturer's Name GPI 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 Dec., 23, 2003					
<u>.</u>	Signature of Preparer (optional)					
Section II - Hazardous Inform	mation					
Hazardous Components:						
Description:						
Cadmium						
Ni(OH)2 (Nickel Hydroxide)						
KOH Solution (Potassium Hydroxide)						
Section III - Physical / Chemica	al Characteristics					
	cific Gravity (H ₂ O=1) N.A.					
Vapor Pressure (mm Hg) Me N.A.	lting Point N.A.					
	poration Rate (Butyl Acetate) N.A.					
Solubility in Water N.A.						
Appearance and Odor	Cylindrical Shape, odorless					
	Cymunical Shape, odoriess					
Section IV – Hazard Classifi	cation					
Classification						
N.A.						





Material Safety Data Sheet for All NiCd cells

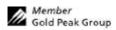
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	Reactivit	y Data						
Stability	Unstable		Conditions to	Avoid				
	Stable	X						
Incompatibility	(Materials to Avoi	(d)						
Hazardous Deco	omposition or Bypi	roducts						
Hazardous Polymerization	May Occur		Conditions to	Avoid				
	Will Not Occur	X						
	I - Health F	lazard Data	l					
Route(s) of		Inhalation?		Skin?		Ingestion?		
Entry			N.A.		N.A.			N.A.
		Chronic) / Toxi						
In case	of electrolyte leak	age, skin will be ito	chy when contain	minated with electrol	yte.			
In conta	act with electrolyte	e can cause severe	irritation and ch	emical burns.				
Inhalati	on of electrolyte v	apors may cause in	ritation of the u	pper respiratory trac	and lungs.			
		d Measures	.					
First Aid Pro	cedures							
If electroly	yte leakage occurs	and makes contac	ct with skin, wa	ash with plenty of wa	ater immediate	ely.		
If electroly	yte comes into con	ntact with eyes, wa	sh with copiou	s amounts of water f	or fifteen (15)	minutes, and con	tact a physician.	
If electroly	te vapors are inha	aled, provide fresh	air and seek m	edical attention if res	spiratory irrita	tion develops. Ver	ntilate the contamin	nated area.
Section V	III - Fire an	d Explosion	Hazard I	Data				
Flash Point (Me	thod Used)	Ignition Temp.	Flai	mmable Limits	LEL		UEL	
	J.A.	N.A.		N.A.		N.A.	N	J.A.
Extinguishing M								
	•	mical or Foam ext	inguishers					
Special Fire Fig.	hting Procedures							
	d Explosion Hazar	de						
	•	in fire - may explo	de.					
Do not	short-circuit batter	y - may cause burn	ns.					





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Section IX	C – Accidental Release or S	pillage	
Steps to Be	Γaken in Case Material is Released	or Spilled	
Batte	ries that are leakage should be handled with	rubber gloves.	
	d direct contact with electrolyte.		
Wear	protective clothing and a positive pressure S	elf-Contained Breathing Apparatus (SCBA).	
Section X	- Handling and Storage		
	g and storage advice		
	teries should be handled and stored carefully		
	not store in disorderly fashion, or allow met	al objects to be mixed with stored batteries.	
	ver disassemble a battery.		
Do	not breathe cell vapors or touch internal mat	erial with bare hands.	
Kee	ep batteries between -30°C and 35°C for pro-	ong storage.	
Section X	I – Exposure Controls / Per	son Protection	
Occupational E	xposure Limits: LTEP	STEP	
	N.A.	N.A.	
Respiratory Pro	tection (Specify Type)		
	N.A.		
Ventilation	Local Exhausts	Special	
	N.A.	N.A.	
	Mechanical (General)	Other	
	N.A.	N.A.	
Protective Gloves		Eye Protection	
N.A.		N.A.	
Other Protective	e Clothing or Equipment	<u> </u>	
	N.A.		
Work / Hygienie	c Practices		
	N.A.		
Section X	II – Ecological Information		
	N.A.		
Section X	III - Disposal Method		
Dispose	of batteries according to government regulation	ons.	





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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.