

For RadioShack Cat. No.: 23-197[E], 23-281[E], 23-290[B], 23-393[A], 23-394[A], 23-396[A]

Identity (As Used on Label and List)	MATERIAL SAFET	Y DATA SHEET			Revised Date: June 28, 02
Emergency Telephone Number	Identity (As Used on Label and List)		Note: Blank space	s are not permitted if	may item is not applicable or no
Manufacturer's Name	GP40AAK		information is ava	ilable, the space must	be marked to indicate that.
Care   International Ltd. / GP Batteries (U.S.A.) Inc.   Address (Number, Street, City, State, and ZIP Code)   Address (Number, Street, City, State, and ZIP Code)   Address (Number, Street, City, State, and ZIP Code)   (852) 2484 3333   (819) 674-5620   Section II - Hazardous Ingredients/Identity Information   Internation Components:	Section I		•		
Address (Number, Street, City, State, and ZIP Code)  RF, Gold Peak Building, 30 Kwaii Wing Road, Kwai Chung, N.T. Hong Kong  RF, Gold Peak Building, 30 Kwaii Wing Road, Kwai Chung, N.T. Hong Kong  RF, Gold Peak Building, 30 Kwaii Wing Road, Kwai Chung, N.T. Hong Kong  RF, Gold Peak Building, 30 Kwaii Wing Road, Kwai Chung, N.T. Hong Kong  RF, Gold Peak Building, 30 Kwaii Wing Road, Kwai Chung, N.T. Hong Kong  RF, Gold Peak Building, 30 Kwaii Wing Road, Kwai Chung, N.T. Hong Kong  RF, Gold Peak Building, 30 Kwaii Wing Road, Kwai Chung, N.T. Hong Kong  RF, Gold Peak Building, 30 Kwaii Wing Road, Kwai Chung, N.T. Hong Kong  RF, Gold Peak Building, 30 Kwaii Wing Road, Kwai Chung, N.T. Hong Kong  RF, Gold Peak Building, 30 Kwaii Wing Road, Kwai Chung, N.T. Hong Kong  RF, Gold Peak Building, 30 Kwaii Wing Road, Kwai Chung, N.T. Hong Kong  RF, Gold Peak Building, 30 Kwaii Wing Road, Kwai Chung, N.T. Hong Kong  RF, Gold Peak Building, 30 Kwaii Wing Road, Kwai Chung, N.T. Hong Kong  RF, Gold Peak Building, 30 Kwaii Wing Road, Kwai Chung, N.T. Hong Kong  RF, Gold Peak Building, 30 Kwaii Wing Road, Kwai Chung, N.T. Hong Kong  RF, Gold Peak Building, St. Wing Road, Kong Kung, N.T. Hong Kong  RF, Gold Peak Building, St. Wing Road, Kong Kung, N.T. Hong Kong  RF, Gold Peak Building, St. Wing Road, Kong Kung, St.	Manufacturer's Name		Emergency Teleph	one Number	
1258 West Bernardo Court, San Diego, CA92127-1638, U.S.A. (619) 674 5620	GPI International Ltd. / GP Batteries (U.S.A.) In	nc.			
	Address (Number, Street, City, State, and ZIP C	Telephone Numbe	r for information		
Section   I - Hazardous Ingredients/Identity Information	8/F, Gold Peak Building, 30 Kwai Wing Road, 1		(852) 2484 3333		
Hazardous Components: Description: Approximate % of total weight  Ni(OH)2 (Nickel Hydroxide) : 17.00  30% KOH Solution (Potassium Hydroxide) : 13.00  Mercury ; < 5 ppm  Lead : Nil  cadmium : 8.000  Section III - Physical/Chemical Characteristics Boiling point N.A. Specific Gravity (H2O=1) N.A. N.A. Vapor Pressure (mm Hg) N.A. Wapor Pressure (mm Hg) N.A. Wapor Density (AIR = 1) N.A. (Butyl Acetate = 1) N.A. Appearance and Odor Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data Flash Point (Method Used) N.A. N.A. N.A. N.A. N.A. N.A. N.A. N.A	11235 West Bernardo Court, San Diego, CA92		(619) 674 5620		
Description: Approximate % of total weight  Ni(OH)2 (Nickel Hydroxide) : 17.00  30%KOH Solution (Potassium Hydroxide) : 13.00  Mercury ; <5 ppm  Lead : Nil  cadmium : 8.000  Section III - Physical/Chemical Characteristics  Boiling point   Specific Gravity (H2O=1)   N.A.   N.A.    Vapor Pressure (mm Hg)   Melting Point   N.A.   N.A.    Vapor Density (AIR=1)   Evaporation Rate   N.A.   (Butyl Acetate =1)   N.A.    Solubility in Water   N.A.   (Butyl Acetate =1)   N.A.    Appearance and Odor   Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data  Flash Point (Method Used)   Flammable Limits   LEL   UEL   N.A.    Extingushing Media   N.A.   N.A.   N.A.   N.A.    Extingushing Media   N.A.   N.A.   N.A.    Extingushing Media   N.A.   N.A.   N.A.    Special Fire Fighting Procedures   N.A.    Unusual Fire and Explosion Hazards	Section II - Hazardous Ingred	dients/Identity Informat	ion		
Ni(OH)2 (Nickel Hydroxide) : 17.00  30% KOH Solution (Potassium Hydroxide) : 13.00  Mercury : S ppm  Lead : Nil  cadmium : 8.000  Section III - Physical/Chemical Characteristics  Boiling point	Hazardous Components:				
Mercury ; <5 ppm  Lead ; Nil  cadmium : 8.000  Section III - Physical/Chemical Characteristics Boiling point Specific Gravity (H2O=1) N.A. N.A.  Vapor Pressure (mm Hg) Melting Point N.A. N.A.  Vapor Density (AIR =1) Evaporation Rate (Butyl Acetate =1) N.A.  Solubility in Water  N.A.  Appearance and Odor  Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data Flash Point (Method Used) N.A. N.A.  Flammable Limits LEL UEL N.A. Special Fire Fighting Procedures N.A.  Special Fire Fighting Procedures N.A.  Unusual Fire and Explosion Hazards	Description:	Approxir	nate % of total weight		
Mercury ; <5 ppm  Lead ; Nil  cadmium : 8.000  Section III - Physical/Chemical Characteristics Boiling point Specific Gravity (H2O=1) N.A. N.A.  Vapor Pressure (mm Hg) Melting Point N.A. N.A.  Vapor Density (AIR =1) Evaporation Rate N.A. (Butyl Acetate =1) N.A.  Solubility in Water  N.A.  Appearance and Odor  Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data Flash Point (Method Used) N.A. N.A.  Extingushing Media N.A.  Special Fire Fighting Procedures N.A.  Unusual Fire and Explosion Hazards					
Mercury ; <5 ppm  Lead : Nil  Cadmium : 8.000  Section III - Physical/Chemical Characteristics Boiling point	Ni(OH)2 (Nickel Hydroxide)	; 17.	00		
Mercury ; <5 ppm  Lead ; Nil  Cadmium : 8.000  Section III - Physical/Chemical Characteristics Boiling point					
Lead ; Nil  cadmium ; 8.000  Section III - Physical/Chemical Characteristics Boiling point Specific Gravity (H2O=1) N.A. N.A.  Vapor Pressure (mm Hg) N.A. Melting Point N.A. N.A.  Vapor Density (AIR = 1) N.A. (Butyl Acetate = 1) N.A.  Solubility in Water  N.A.  Appearance and Odor  Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data Flash Point (Method Used) N.A. N.A. N.A. N.A. N.A.  Extingushing Media N.A.  Special Fire Fighting Procedures N.A.  Unusual Fire and Explosion Hazards	30% KOH Solution (Potassium Hydroxide)	; 13.	00		
Lead ; Nil  cadmium ; 8.000  Section III - Physical/Chemical Characteristics Boiling point Specific Gravity (H2O=1) N.A. NA.  Vapor Pressure (mm Hg) N.A. Melting Point N.A. N.A.  Vapor Density (AIR = 1) N.A. (Butyl Acetate = 1) N.A. (Butyl Acetate = 1) N.A.  Solubility in Water  N.A.  Appearance and Odor  Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data Flash Point (Method Used) N.A. N.A. N.A. N.A. N.A.  Extingushing Media N.A.  Special Fire Fighting Procedures N.A.  Unusual Fire and Explosion Hazards					
Section III - Physical/Chemical Characteristics Boiling point  N.A.  Vapor Pressure (mm Hg)  N.A.  Wapor Density (AIR = 1)  Solubility in Water  N.A.  Appearance and Odor  Cytindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data  Flash Point (Method Used)  N.A.  N.A.  Flammable Limits  N.A.  N.A.	Mercury	; <5 p	pm		
Section III - Physical/Chemical Characteristics Boiling point  N.A.  Vapor Pressure (mm Hg)  N.A.  Vapor Density (AIR = 1)  Solubility in Water  N.A.  Appearance and Odor  Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data  Flash Point (Method Used)  N.A.  Extingushing Media  N.A.  Special Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards					
Section III - Physical/Chemical Characteristics  Boiling point	Lead	; Ni	il		
Section III - Physical/Chemical Characteristics  Boiling point					
Boiling point  N.A.  N.A.  Wapor Pressure (mm Hg)  N.A.  Wapor Density (AIR = 1)  Evaporation Rate  N.A.  (Butyl Acetate = 1)  N.A.  Appearance and Odor  Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data  Flash Point (Method Used)  N.A.  Extingushing Media  N.A.  Special Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards  Special Fire and Explosion Hazards  Special Fire and Explosion Hazards	cadmium	; 8.0	00		
Boiling point  N.A.  N.A.  Wapor Pressure (mm Hg)  N.A.  Wapor Density (AIR = 1)  Evaporation Rate (Butyl Acetate = 1)  N.A.  Solubility in Water  N.A.  Appearance and Odor  Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data  Flash Point (Method Used)  N.A.  Extingushing Media  N.A.  Special Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards  Special Fire and Explosion Hazards  Special Fire and Explosion Hazards					
N.A.  N.A.  Wapor Pressure (mm Hg)  N.A.  Melting Point  N.A.  N.A.  Wapor Density (AIR = 1)  Evaporation Rate  N.A.  (Butyl Acetate = 1)  N.A.  Solubility in Water  N.A.  Appearance and Odor  Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data  Flash Point (Method Used)  N.A.  Flammable Limits  N.A.  N.A.  N.A.  N.A.  N.A.  N.A.  N.A.  N.A.  Whusual Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards	Section III - Physical/Chemic	cal Characteristics			
Vapor Pressure (mm Hg)  N.A.  Vapor Density (AIR =1)  N.A.  Evaporation Rate  N.A.  (Butyl Acetate =1)  N.A.  Solubility in Water  N.A.  Appearance and Odor  Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data  Flash Point (Method Used)  N.A.  Extingushing Media  N.A.  Special Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards  Unusual Fire and Explosion Hazards	Boiling point	Specific Gravity	(H2O=1)		
N.A.   N.A.   Vapor Density (AIR = 1)   Evaporation Rate   N.A.   (Butyl Acetate = 1)   N.A.   Solubility in Water   N.A.   Appearance and Odor   Cylindrial Shape, odorless   Section IV - Fire and Explosion Hazard Data   Flash Point (Method Used)   Flammable Limits   LEL   UEL   N.A.   N.A.   N.A.   N.A.   Extingushing Media   N.A.   Special Fire Fighting Procedures   N.A.   Unusual Fire and Explosion Hazards	N.A.		N.A.		
N.A.   N.A.   N.A.   Vapor Density (AIR = I)   Evaporation Rate     N.A.   (Butyl Acetate = I)   N.A.   Solubility in Water   N.A.   Appearance and Odor	Vapor Pressure (mm Hg)	Melting Point			
N.A. (Butyl Acetate = 1) N.A.  Solubility in Water  N.A.  Appearance and Odor  Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data  Flash Point (Method Used)  N.A.  Flammable Limits  N.A.  Extingushing Media  N.A.  Special Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards			N.A.		
N.A. (Butyl Acetate = 1) N.A.  Solubility in Water  N.A.  Appearance and Odor  Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data  Flash Point (Method Used)  N.A.  Flammable Limits  N.A.  Extingushing Media  N.A.  Special Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards	Vapor Density (AIR =1)	Evaporation Rate	e		
Solubility in Water  N.A.  Appearance and Odor  Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data  Flash Point (Method Used)  N.A.  Flammable Limits  N.A.  N.A.  N.A.  N.A.  N.A.  Special Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards	N.A.	(Butyl Acetate =	1) N.A.		
Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data  Flash Point (Method Used)  N.A.  N.A.  N.A.  N.A.  Special Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards	Solubility in Water	1, 2	•		
Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data  Flash Point (Method Used)  N.A.  N.A.  N.A.  Special Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards	N.A.				
Cylindrial Shape, odorless  Section IV - Fire and Explosion Hazard Data  Flash Point (Method Used)  N.A.  N.A.  Extingushing Media  N.A.  Special Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards					
Section IV - Fire and Explosion Hazard Data  Flash Point (Method Used)  N.A.  Extingushing Media  N.A.  Special Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards	**	d Shape, odorless			
Flash Point (Method Used)  N.A.  N.A.  N.A.  N.A.  Extingushing Media  N.A.  Special Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards					
N.A. N.A. N.A. N.A.  Extingushing Media  N.A.  Special Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards			ole Limits	LEL	UEL
Extingushing Media  N.A.  Special Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards	,				
N.A.  Special Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards			2 112 21	1 2 32 23	111121
Special Fire Fighting Procedures  N.A.  Unusual Fire and Explosion Hazards	· ·				
N.A. Unusual Fire and Explosion Hazards					
Unusual Fire and Explosion Hazards	* *				
·					
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Section V	- Reactivity Data								
Stability	Unstable	Conditions to Avoid	oid .						
	Stable X								
Incompatibility (I	Materials to Avoid)								
Hazardous Decon	nposition or Byproducts								
When heated, bat	tery may emit hazardous vapo	urs of KOH/NaOH & Hg.							
Hazardous	May Occur	Conditions to Avoid							
reactions									
	Will Not Occur X								
Castian \/I	Llootth Llozord [	) oto							
	- Health Hazard [			.: 0					
Route(s) of Entry	Inhalatio		_	estion?					
TT 1:1 TT 1:/4	1.01	N.A.	N.A.		N.A.				
Health Hazard (A	cute and Chronic)	NI A							
Caraina	NTP?	N.A.	Managements? Of	IIA D1	-4-10				
Carcinogenicity	NIP!	LARC	Monographs? OS	HA Regul	ated?				
		N.A.	N.A.		N.A.				
Signs and Sympto	oms of Exposure	N.A.	N.A.		N.A.				
	yte leakage, skin will be itchly	when contaminated by elec	trolyte						
Medical Condition	•	when committee of elec	a ory to:						
	ated by Exposure	N.A.							
	First Aid Procedures								
		immediately with water. Fo	r eye contact, flush w	ith copiou	s amounts of water for 15 minutes				
and see physian.		·							
Section VI	I - Precautions for	Safe Handling a	nd Use						
	n in Case Material is Released								
-		•	rom leaker comes in c	contact wit	h skin, wash immediately with				
Use neoprene, rubber latex-nitrile gloves when handling leakers. If liquid from leaker comes in contact with skin, wash immediately with water. For eye contact, flush with copious amounts of water for 15 minutes and see physian.									
	,								
Waste Disposal M	Tethod								
-	since battery may explode.								
	· · ·								
Precaution to Be	Taken in Handling and Storin	g							
The battery is ext	remely sensitive to adverse ef	fect of humidity. Be sure to	store them in a place	which is o	lry and subject to little temperature				
		•			attery in fire. Do not charge the battery.				
		-			g in such manner can cause the battery				
to explode, leak a	· · · · · ·	*		, ,	•				
Other Precautions									
Install batteries in accordance with equipment instructions. Replace all batteries in equipment at the same time. Do not mix battery systems of									
different types. I	Oo not carry batteries loose in	your pocket or carrying bag.	Check batteries peri	odically w	hen in use.				
Section VI	II - Control Measu	res							
-	ction (Specify Type)								
	(op)								
Ventilation	Local Exhausts		Special						
		N.A.		N.A.					
	Mechanical (General)		Other						
		N.A.		N.A.					
Protective Gloves	3		Eye Protection						
		N.A.		N.A.					
Other Protective	Clothing or Equipment								
		N.A.							
Work/Hygenic Pr	ractices								
		N.A.							