GP Batteries



Material Safety Data Sheet

Model No.: GP23A

Note: Blank s	paces are not permitted if an	y item is not applicable or no in	formation is ava	ilable, the space must be marked to ind	icate that.
Identity (As U	Jsed on Label and List)		F	Part Number	_
	GP23	A		GP23A	
Section	I- Information of N	Manufacturer	•		
Manufacturer's	s Name				
	GP Batteries Internation				
Address (Num	aber, Street, City, State, and	ZIP Code)			
Section	II - Hazardous Ind	gredients/Identity Inf	formation		
		greaterits/lueritity irii	Ullialion		
Hazardous Components: Description:		Apr	proximate % of to	otal weight	
1			· · · · · · · · · · · · · · · · · · ·		
manganese d	ioxide		17.9	Wt%	
zinc			5.2	Wt%	
mercury lead			0.17	Wt% Wt%	
lead cadmium			0.0028 Nil	VV 170	
	oxide and potassium		6.5	Wt%	
	ixture, 30-35% solution				
Section III - Physical/Chemical Char		nicai Unaracteristic	S		
	in - i frysica//Offer		Sravity (H2O=1)		
Form	N.A	Specific G	ravity (H2O=1)	N.A.	
Form	N.A	Specific C	ravity (H2O=1)		
Form Boiling point	N.A N.A	Specific Co	oint		
Form Boiling point	N.A N.A	Specific Comments of the Melting Position of the Melti	oint on Rate		
Form Boiling point Vapor Pressur	N.A N.A e (mm Hg) N.A	Specific C Melting P Evaporati (Butyl Ac	oint on Rate	N.A.	
Form Boiling point Vapor Pressur Vapor Density	N.A N.A e (mmHg) N.A v (AIR = 1) N.A	Specific C Melting P Evaporati (Butyl Ac pH	oint on Rate etate =1)	N.A.	
Form Boiling point Vapor Pressur Vapor Density	N.A N.A e (mm Hg) N.A v (AIR = 1) N.A	Specific C Melting P Evaporati (Butyl Ac pH Appearan	oint on Rate	N.A. N.A.	
Form Boiling point Vapor Pressur Vapor Density Solubility in	N.A N.A re (mm Hg) N.A r (AIR = 1) N.A Water N.A	Specific G Melting P Evaporati (Butyl Ac pH Appearance	oint on Rate etate =1)	N.A.	
Form Boiling point Vapor Pressur Vapor Density Solubility in	N.A N.A e (mm Hg) N.A v (AIR = 1) N.A	Specific G Melting P Evaporati (Butyl Ac pH Appearance	oint on Rate etate =1)	N.A. N.A.	
Form Boiling point Vapor Pressur Vapor Density Solubility in	N.A N.A e (nmHg) N.A v (AIR = 1) N.A Water N.A V - Hazard classi	Specific C Melting P Evaporati (Butyl Ac pH Appearance fication	oint on Rate etate =1)	N.A. N.A.	
Form Boiling point Vapor Pressur Vapor Density Solubility in V	N.A N.A N.A e (nmHg) N.A v (AIR = 1) N.A Water N.A V - Hazard classi	Specific Comments of the second secon	oint on Rate etate =1)	N.A. N.A.	
Form Boiling point Vapor Pressur Vapor Density Solubility in ' Section I	N.A N.A e (mmHg) N.A v (AIR=1) N.A Water N.A V - Hazard classi N.A V - Reactivity Date	Specific G Melting P Evaporation (Butyl Ac pH Appearance fication	oint on Rate etate =1)	N.A. N.A.	
Form Boiling point Vapor Pressur Vapor Density Solubility in ' Section I	N.A N.A N.A e (nmHg) N.A v (AIR = 1) N.A Water N.A V - Hazard classi	Specific Comments of the second secon	oint on Rate etate =1)	N.A. N.A.	
Form Boiling point Vapor Pressur Vapor Density Solubility in ' Section I Section ' Stability	N.A N.A e (mmHg) N.A v (AIR=1) N.A Water N.A V - Hazard classi N.A V - Reactivity Date	Specific G Melting P Evaporation (Butyl Ac pH Appearance fication	oint on Rate etate =1)	N.A. N.A.	
Form Boiling point Vapor Pressur Vapor Density Solubility in ' Section I	N.A N.A (mmHg) N.A (AIR=1) N.A Water N.A V - Hazard classi N.A V - Reactivity Date Unstable ()	Specific G Melting P Evaporation (Butyl Ac pH Appearance fication	oint on Rate etate =1)	N.A. N.A.	
Form Boiling point Vapor Pressur Vapor Density Solubility in V Section I Section 'S Stability Yes = (X)	N.A N.A N.A e (mmHg) N.A V (AIR = 1) N.A Water N.A V - Hazard classi N.A V - Reactivity Data Unstable () Stable	Specific G Melting P Evaporation (Butyl Ac pH Appearance fication	oint on Rate etate =1)	N.A. N.A.	
Form Boiling point Vapor Pressur Vapor Density Solubility in Section I Stability Yes = (X) Incompatibility	N.A N.A N.A (e (mmHg) N.A (AIR=1) N.A Water N.A V - Hazard classi N.A V - Reactivity Data Unstable () Stable (X) Ey (Materials to Avoid)	Specific Conditions to Avoid	oint on Rate etate =1)	N.A. N.A.	
Form Boiling point Vapor Pressur Vapor Density Solubility in Section I Stability Yes = (X) Incompatibility Hazardous De	N.A N.A N.A (e (mmHg) N.A (AIR=1) N.A Water N.A V - Hazard classi N.A V - Reactivity Data Unstable () Stable (X) Ey (Materials to Avoid) Composition or Byproducts	Specific Conditions to Avoid	oint on Rate etate =1) ce and Odor	N.A. N.A. N.A.	
Form Boiling point Vapor Pressur Vapor Density Solubility in Section I Section ' Stability Yes = (X) Incompatibilit Hazardous De When I	N.A N.A N.A (e (mmHg) N.A (AIR=1) N.A Water N.A V - Hazard classi N.A V - Reactivity Data Unstable () Stable (X) Ly (Materials to Avoid) composition or Byproducts meated, battery may	Melting P Evaporati (Butyl Ac pH Appearance fication Conditions to Avoid	oint on Rate etate =1) ce and Odor	N.A. N.A. N.A.	
Form Boiling point Vapor Pressur Vapor Density Solubility in Section I Section V Stability Yes = (X) Incompatibilit Hazardous De When I Hazardous	N.A N.A N.A (e (mmHg) N.A (AIR=1) N.A Water N.A V - Hazard classi N.A V - Reactivity Data [Unstable	Specific Conditions to Avoid	oint on Rate etate =1) ce and Odor	N.A. N.A. N.A.	
Form Boiling point Vapor Pressur Vapor Density Solubility in V Section I Section V Stability Yes = (X) Incompatibilit Hazardous De When I Hazardous reactions	N.A N.A N.A (e (mmHg) N.A (AIR=1) N.A Water N.A V - Hazard classi N.A V - Reactivity Data Unstable () Stable (X) Ey (Materials to Avoid) Excomposition or Byproducts neated, battery may May Occur ()	Melting P Evaporati (Butyl Ac pH Appearance fication Conditions to Avoid	oint on Rate etate =1) ce and Odor	N.A. N.A. N.A.	
Form Boiling point Vapor Pressur Vapor Density Solubility in Section I Section V Stability Yes = (X) Incompatibilit Hazardous De When I Hazardous	N.A N.A N.A (e (mmHg) N.A (AIR=1) N.A Water N.A V - Hazard classi N.A V - Reactivity Data [Unstable	Melting P Evaporati (Butyl Ac pH Appearance fication Conditions to Avoid	oint on Rate etate =1) ce and Odor	N.A. N.A. N.A.	

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Section VI - Health Haz	Inhalation?	Skin?	Ingestion?		
Xoute(s) of Entry Tes = (X)	(N.A.)	(N.A.)	(N.A.)		
Health Hazard (Acute and Chronic)			(11.21)		
In case of electrolyte le	aakaga ekin will	ha itchy whan con	taminated s	with alactrol	luto
in case of electrolyte i	eakage, skiii wiii	be itely when con	itammateu v	viui electroi	lyte.
.					
Section VII - First Aid I	Measures	_			
First aid Procedures					
If alastrolyta lankaga	agairs and makes	contact with skin	weeh imm	adiataly	
If electrolyte leakage of	occurs and makes	Contact with Skill	, wasii iiiiii	ediately.	
If electrolyte comes in	nto contact with e	yes, wash with co	pious amou	ints of wate	r for fifteen
If electrolyte comes in		eyes, wash with co	pious amou	ints of wate	er for fifteen
minutes, and contact a	physician.		pious amou	ints of wate	er for fifteen
minutes, and contact a Section VIII - Fire and	physician. Explosion Haza	rd Data	pious amou		
minutes, and contact a Section VIII - Fire and Flash Point (Method Used)	physician. Explosion Haza Ignition temp.			LEL	UEL
minutes, and contact a Section VIII - Fire and	physician. Explosion Haza	rd Data	n.a.		
minutes, and contact a Section VIII - Fire and Flash Point (Method Used) N.A. Extingushing Media N.A.	physician. Explosion Haza Ignition temp.	rd Data		LEL	UEL
minutes, and contact a Section VIII - Fire and Flash Point (Method Used) N.A. Extingushing Media N.A. Special Fire Fighting Procedures	physician. Explosion Haza Ignition temp.	rd Data		LEL	UEL
minutes, and contact a Section VIII - Fire and Flash Point (Method Used) N.A. Extingushing Media N.A. Special Fire Fighting Procedures N.A.	Explosion Haza Ignition temp. N.A.	rd Data		LEL	UEL
minutes, and contact a Section VIII - Fire and Flash Point (Method Used) N.A. Extingushing Media N.A. Special Fire Fighting Procedures	Explosion Haza Ignition temp. N.A.	rd Data Flammable Limits		LEL	UEL
minutes, and contact a Section VIII - Fire and Flash Point (Method Used) N.A. Extingushing Media N.A. Special Fire Fighting Procedures N.A. Unusual Fire and Explosion Hazard	Explosion Haza Ignition temp. N.A. sery in fire - may 6	rd Data Flammable Limits explode.		LEL	UEL
minutes, and contact a Section VIII - Fire and Flash Point (Method Used) N.A. Extingushing Media N.A. Special Fire Fighting Procedures N.A. Unusual Fire and Explosion Hazard Do not dispose of batte	Explosion Haza Ignition temp. N.A. sery in fire - may cause	rd Data Flammable Limits explode.		LEL	UEL
minutes, and contact a Section VIII - Fire and Flash Point (Method Used) N.A. Extingushing Media N.A. Special Fire Fighting Procedures N.A. Unusual Fire and Explosion Hazard Do not dispose of batto Do not short-circuit be Section IX - Accidenta	Explosion Haza Ignition temp. N.A. sery in fire - may cause attery - may cause I Release or Spi	rd Data Flammable Limits explode.		LEL	UEL
minutes, and contact a Section VIII - Fire and Flash Point (Method Used) N.A. Extingushing Media N.A. Special Fire Fighting Procedures N.A. Unusual Fire and Explosion Hazard Do not dispose of batte	Explosion Haza Ignition temp. N.A. sery in fire - may cause attery - may cause I Release or Spi	rd Data Flammable Limits explode.		LEL	UEL
minutes, and contact a Section VIII - Fire and Flash Point (Method Used) N.A. Extingushing Media N.A. Special Fire Fighting Procedures N.A. Unusual Fire and Explosion Hazard Do not dispose of batto Do not short-circuit be Section IX - Accidenta Steps to Be Taken in Case Material in	I physician. Explosion Haza Ignition temp. N.A. sery in fire - may cause attery - may cause I Release or Spilled	rd Data Flammable Limits explode. e burns. illage	N.A.	LEL	UEL
minutes, and contact a Section VIII - Fire and Flash Point (Method Used) N.A. Extingushing Media N.A. Special Fire Fighting Procedures N.A. Unusual Fire and Explosion Hazard Do not dispose of batto Do not short-circuit be Section IX - Accidenta	I physician. Explosion Haza Ignition temp. N.A. sery in fire - may cause attery - may cause I Release or Spilled	rd Data Flammable Limits explode. e burns. illage	N.A.	LEL	UEL
minutes, and contact a Section VIII - Fire and Flash Point (Method Used) N.A. Extingushing Media N.A. Special Fire Fighting Procedures N.A. Unusual Fire and Explosion Hazard Do not dispose of batto Do not short-circuit be Section IX - Accidenta Steps to Be Taken in Case Material in	I physician. Explosion Haza Ignition temp. N.A. sery in fire - may cause attery - may cause I Release or Spilled In g should be hand	rd Data Flammable Limits explode. e burns. illage	N.A.	LEL	UEL
minutes, and contact a Section VIII - Fire and Flash Point (Method Used) N.A. Extingushing Media N.A. Special Fire Fighting Procedures N.A. Unusual Fire and Explosion Hazard Do not dispose of batto Do not short-circuit be Section IX - Accidenta Steps to Be Taken in Case Material in	I physician. Explosion Haza Ignition temp. N.A. sery in fire - may cause attery - may cause I Release or Spilled In g should be hand	rd Data Flammable Limits explode. e burns. illage	N.A.	LEL	UEL
minutes, and contact a Section VIII - Fire and Flash Point (Method Used) N.A. Extingushing Media N.A. Special Fire Fighting Procedures N.A. Unusual Fire and Explosion Hazard Do not dispose of batto Do not short-circuit be Section IX - Accidenta Steps to Be Taken in Case Material in	I physician. Explosion Haza Ignition temp. N.A. sery in fire - may cause attery - may cause I Release or Spilled In g should be hand	rd Data Flammable Limits explode. e burns. illage	N.A.	LEL	UEL
minutes, and contact a Section VIII - Fire and Flash Point (Method Used) N.A. Extingushing Media N.A. Special Fire Fighting Procedures N.A. Unusual Fire and Explosion Hazard Do not dispose of batto Do not short-circuit be Section IX - Accidenta Steps to Be Taken in Case Material in	I physician. Explosion Haza Ignition temp. N.A. sery in fire - may cause attery - may cause I Release or Spilled In g should be hand	rd Data Flammable Limits explode. e burns. illage	N.A.	LEL	UEL
minutes, and contact a Section VIII - Fire and Flash Point (Method Used) N.A. Extingushing Media N.A. Special Fire Fighting Procedures N.A. Unusual Fire and Explosion Hazard Do not dispose of batto Do not short-circuit be Section IX - Accidenta Steps to Be Taken in Case Material in	I physician. Explosion Haza Ignition temp. N.A. sery in fire - may cause attery - may cause I Release or Spilled In g should be hand	rd Data Flammable Limits explode. e burns. illage	N.A.	LEL	UEL

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	X - Handling and S and storage advice	Ü	
The bat	ttery is extremely se	ensitive to adv	verse effects of humidity. Be sure to store them in a
place w	hich is dry and subj	ject to little te	emperature change. Do not place near the boiler or
radiato	r, nor expose to dire	ect sun light.	Do not dispose of the battery in fire. Do not charge
the batt	terv. Do not short-c	circuit the bat	tery. Do not put in backward position. Do not
	=		al objects to be mixed with stored batteries. Do not
	-		<u>.</u>
	mble the battery, ha	naling in sucl	h manner can cause the battery to explode, leak and
injury.			
	XI - Exposure Con		
Occupational	Exposure Limits :	LTEP N.A.	STEP N.A.
Respiratory P	rotection (Specify Type)		1741
Ventilation	Local Exhausts	N.A.	Special
		N.A.	N.A.
	Mechanical (General)	XX 4	Other
Protective Glo	oves	N.A.	N.A. Eye Protection
Total Total	0103	N.A.	N.A.
Other Protect	ive Clothing or Equipment		
Work/Hygeni	c Practices	N.A.	
,, ork/11ygcIII	c i ractices	N.A.	
	XII - Ecological Info	ormation	
Section 2			
Section 2			
Section 2		N.A.	
Section 2		N.A.	
	XIII - Disposal Met		
	XIII - Disposal Met		

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