### **About This Manual**

**Power Source Database User's** Guide introduces the new look of the database **software** and provides the basic procedures to begin your search. In this manual, the user will learn the basic features of the **Power Source Database** software, including the new user interface. Designed to apprise users of the fundamentals quickly and easily, this manual provides step-by-step procedures to start using the most powerful **Power Source Database** available in the new guide revised October 2011.

## **Chapter 1: Registration**

First step for using the database is to register for a subscription.

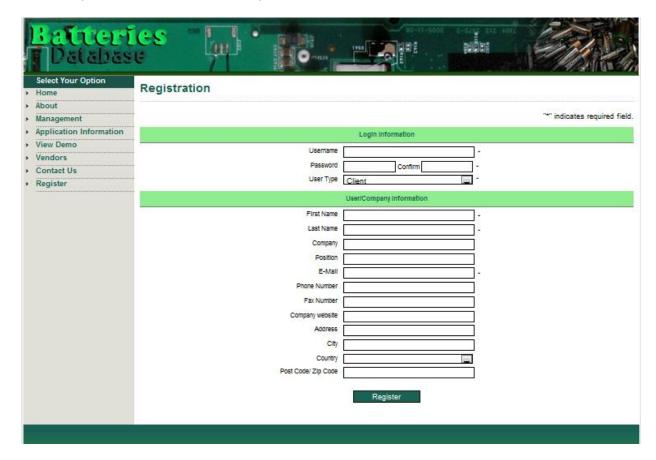
Fill in the registration form located at:

http://www.batteriesdatabase.com/App/Common/Registration.aspx

Send us the registration form by selecting the "Register" icon.

Within 48 hours we will send you a proforma invoice for the subscription fee for the database.

After full payment transfer has been made, we will provide you with a username and password which will allow you to use the database for a year.



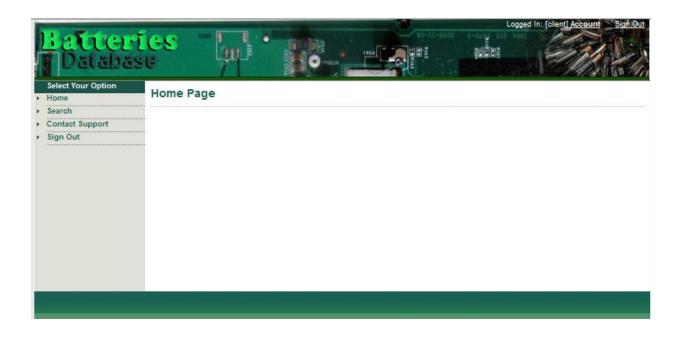
# **Chapter 2: Getting Started with the Power Sources Database**

Enter the database by typing your username and password at the database login page and select the log in icon: http://www.batteriesdatabase.com/App/Default.aspx



You will enter the database from the Home screen:

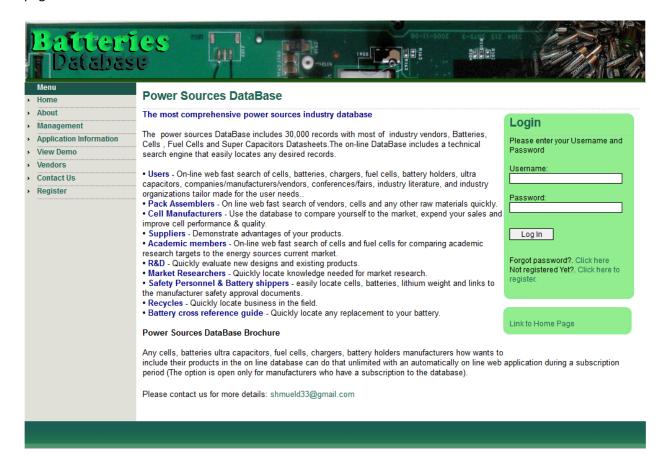
Home – still under construction.



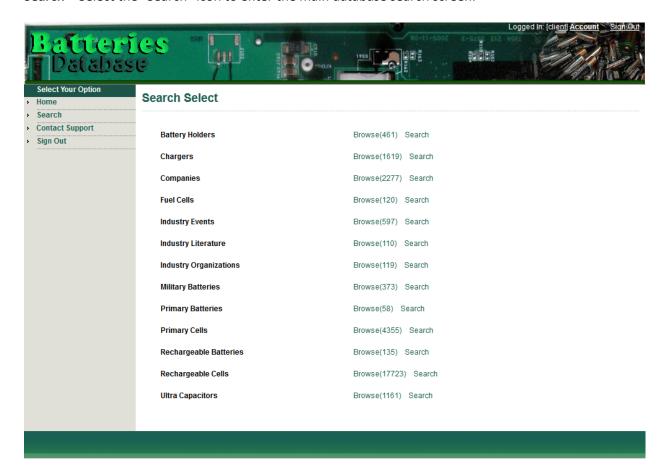
**Contact Support** – To send us a request for support, please fill in the subject and the message fields and select the "Submit" icon for sending us your support request. We will respond within 24 hours.



**Sign Out** – Select the "Sign Out" icon to sign out from the software and return to the database Menu page.



**Search** – Select the "Search" icon to enter the main database search screen.



On the left is a list of 13 database modules.

#### **Module 1: Battery Holders**

Includes 461 standard battery holders PDF data sheets and links to the web sites manufacturer's data sheets.

#### **Module 2: Chargers**

Includes 1,691 standard battery chargers PDF data sheets and links to the web site manufacturer's data sheets.

#### **Module 3: Companies**

Includes 2,277 industry companies classified according to address details, manufactured products, battery chemistries and fuel cell types.

#### **Module 4: Fuel Cells**

Includes 120 standard fuel cells PDF data sheets and links to the web site manufacturer's data sheets.

#### **Module 5: Industry Events**

Includes 597 future and past industry conferences/fairs/events with a PDF page about the event and links to the event web site.

#### **Module 6: Industry Literature**

Includes 110 web links to industry magazines and portals.

#### **Module 7: Industry Organizations**

Includes 119 web links to industry organizations.

#### **Module 8: Military Batteries**

Includes 373 military batteries PDF data sheets and links to the web site manufacturer's data sheets.

#### **Module 9: Primary Batteries**

Includes 58 standard primary batteries PDF data sheets and links to the web site manufacturer's data sheets. (This module is expected to be expanded to 1000 batteries within a year).

#### **Module 10: Primary Cells**

Includes 4,355 primary cells PDF data sheets and links to the web site manufacturer's data sheets.

#### **Module 11: Rechargeable Batteries**

Includes 135 standard primary batteries PDF data sheets and links to the web site manufacturer's data sheets. (This module is expected to be expanded to 1000 batteries within a year).

#### **Module 12: Rechargeable Cells**

Includes 17,723 primary cells PDF data sheets and links to the web site manufacturer's data sheets.

#### **Module 13: Ultra Capacitors**

Includes 1,161 ultra capacitors PDF data sheets and links to the web site manufacturer's data sheets.

## Chapter 3: How to Use the "Browse" Option

The "Browse" option is the same in all modules.

Select the Primary Cells "Browse" icon and receive the primary cells table view.



This page includes a table with 20 first records inside the primary cells module. Right scroll to see all the table columns. Select page numbers on the lower menu for scrolling between records.

Select the "View All Records" option in the upper Menu to see all records in one table.

Select the "Back to Product List" option in the upper menu for returning to the main database search operating screen.

Select the "Print" option in the upper menu for printing the table.

Selecting a column header will sort the records from A-Z and second select will sort the records from Z-A and vise versa.

Select a record inside the table by clicking the select in the left side of the record – that will transfer you to the record page view.



Select "Go Back to Previous Page" for returning to the record table view.

#### Scroll right to the end of the table view:

Weight Power Density (W/KG)	Volume Power Density (W/L)	Weight Capacity Density (AH/KG)	Volume Capacity Density (AH/L)	Constant C-Rate	Pulse C- Rate	Weight	Lithium Weight (gr)	Interna Vent	Internal Blocking Diode	Internal Parallel Diode	Internal Fuse	Internal Fuse Value (A)	Shut Down Seperator	Pass UN Tests	Transportation Status	RoHS Compliance	UL recognition	Primary Cell PDF Link	Primary Cell Web Site Link
91.7647	174.9843	113.7255	216.8608	0.2	0.3	51	1.7	Yes	No	No	Yes	5	Unknown	Yes	Class 9	Yes	Yes	View PDF	View Link
64.8	120.1245	130	240.9906	0.1	0.3	100	3.8	Yes	No	No	Yes	5	Unknown	Yes	Class 9	Yes	Yes	View PDF	View Link
14.1573	30.1465	134.8315	287.1095	0	0.1	8.9	0.3	No	No	No	No	0	Unknown	Yes	Non Restricted	Yes	Yes	View PDF	View Link
10.7784	21.5332	155.6886	311.0353	0	0.1	16.7	0.7	No	No	No	No	0	No	Yes	Non Restricted	Yes	Yes	View PDF	View Link
11.25	20.7251	160.4167	295.5241	0	0	48	2	Yes	No	No	Yes	2.2	Unknown	Yes	Class 9	Yes	Yes	View PDF	View Link
10	17.072	188.8889	322.4704	0	0	90	4.5	Yes	No	No	Yes	2.2	No	Yes	Class 9	Yes	Yes	View PDF	View Link
186.6667	296.2268	73.3333	116.3748	0.9	2.3	30	8.0	Yes	No	No	No	0	Unknown	Yes	Non Restricted	Yes	Yes	View PDF	View Link
175	269.9715	93.75	144.6276	0.7	1.6	40	1.2	Yes	No	No	No	0	Unknown	Yes	Class 9	Yes	Yes	View PDF	View Link
140	206.7474	87.5	129.2171	0.6	2.9	40	1.1	Yes	No	No	No	0	Unknown	Yes	Class 9	Yes	No	View PDF	View Link
133.3333	210.9584	91.2698	144.406	0.5	1.7	63	1.9	Yes	No	No	No	0	Unknown	Yes	Class 9	Yes	Yes	View PDF	View Link
82.3529	128.5646	91.1765	142.3394	0.3	0.6	85	2.4	Yes	No	No	No	0	Unknown	Yes	Class 9	Yes	Yes	View PDF	View Link
131.7647	205.7034	88.2353	137.7478	0.5	2	85	2.3	Yes	No	No	No	0	Unknown	Yes	Class 9	Yes	Yes	View PDF	View Link
72.9167	113.623	83.3333	129.8548	0.3	1.3	96	2.6	Yes	No	No	No	0	Unknown	Yes	Class 9	Yes	Yes	View PDF	View Link
67.2	104.8401	92	143.5311	0.3	5.2	125	3.9	Yes	No	No	No	0	Unknown	Yes	Class 9	Yes	Yes	View PDF	View Link
106.7485	168.8348	98.1595	155.2504	0.4	1.3	163	0	Yes	No	No	No	0	Unknown	Yes	Class 9	Yes	No	View PDF	View Link
7.6825	20.1774	128.041	336.2893	0	0	23.43	0.67	No	No	No	No	0	No	Yes	Non Restricted	Yes	No	View PDF	View Link
36	66.7359	120	222.4528	0.1	0.3	100	4	Yes	No	No	Yes	5	Unknown	Yes	Class 9	Yes	No	View PDF	View Link
161.1111	271.2894	47.7778	80.4513	1.2	2.3	18	0.3	Yes	No	No	No	0	Unknown	Yes	Non Restricted	Yes	Yes	View PDF	View Link
2.8462	9.5876	76.9231	259.1242	0	0	13	0.4	No	No	No	No	0	No	Yes	Non Restricted	Yes	Yes	View PDF	View Link
2.9231	9.8726	76.9231	259.8061	0	0	13	0.3	No	No	No	No	0	No	Yes	Non Restricted	Yes	Yes	View PDF	View Link

Selecting the "View PDF" of a specific cell record will transfer you to the cell PDF data sheet.



Selecting "View Link" of a specific cell record will transfer you to the cell web link data sheet.

## **Chapter 4: How to Use the Search Engine**

Search logic is the same in all modules.

Select the search option of the primary cells and receive the search engine of the primary cell module:



The search engine includes Alfa-Beta fields such as company name field, numeric fields like open circuit voltage (v) field and calculation fields such as the Volume Energy Density (Wh/I) field.

You can select any search conditions on any field to receive the search records that meet these conditions.

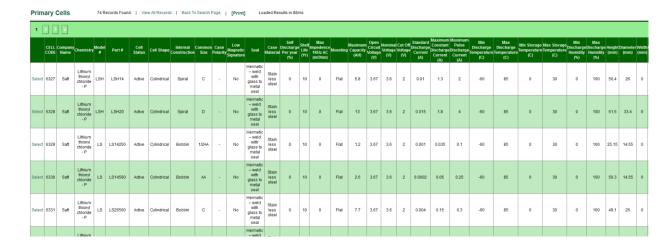
You can use:=, =!, start with, is null, is not null, not like, like conditions for Alfa\_Beta fields. =, =!, >, >=, <, <=, <> conditions for numerical or calculative fields.

For instance: typing ="Saft" in the company name field will retrieve all records of cells manufactured by Saft Batteries.

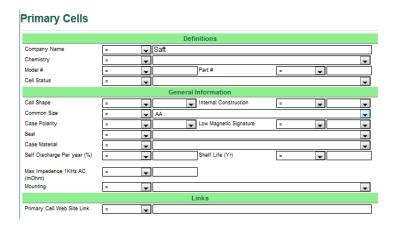
#### **Primary Cells**

Definitions											
Company Name	=	Saft									
Chemistry	=				-						
Model #	=		Part #	=	₩						
Cell Status	=				-						
General Information											
Cell Shape	=	-	Internal Construction	=	<b>T</b>						
Common Size	=				-						
Case Polarity	=	-	Low Magnetic Signature	=	<b>~</b>						
Seal	=				-						
Case Material	=				•						
Self Discharge Per year (%)	=		Shelf Life (Yr)	=	₩						
Max Impedence 1KHz AC (mOhm)	= •		]								
Mounting	=				-						
Links											
Primary Cell Web Site Link	=										

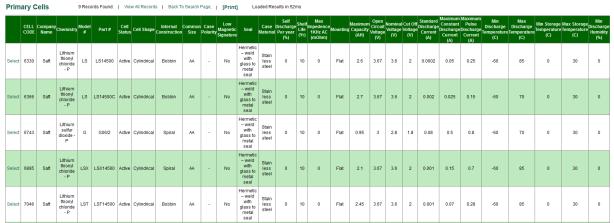
Select the "Jump to Search Results" icon in the upper menu and receive 74 cells records manufactured by Saft.



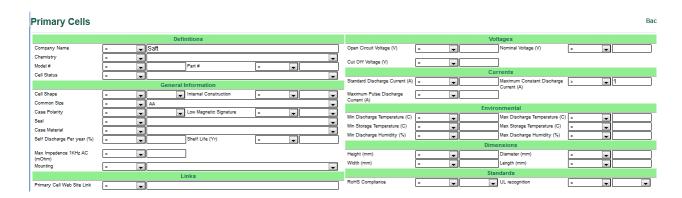
Adding additional conditions to the current condition of ="Saft" such as Common Size ="AA" will bring all cells records manufactured by Saft with AA cell size.



Search Results include only 9 cell records of Saft AA cells.



Adding another condition to the current condition of ="Saft" and Common Size ="AA" such as Maximum Constant Discharge Current (A) ">1" will bring all cells records manufactured by Saft with AA cell size and maximum constant discharge current of >1A.



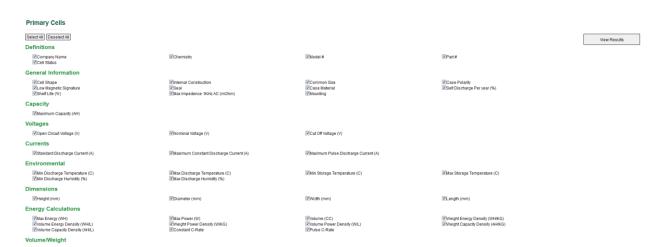
Search Results include 0 cell records as there are no cells that include these search condition parameters.

How to narrow the number of columns in the search results table to only the desired parameters?

On the upper menu of the search engine we can find the icon "Proceed to Column Selection".

After selecting the search conditions select that icon.

You will receive a field selection page.



Select the fields you would like to see in the results table – for instance company name and chemistry:



Then select the "View Results" icon and receive a search results table with only the selected fields:



With the same logic use the search engine for other modules and find the results you are looking for.

Shmuel De-Leon/CEO

Shmuel De-Leon Energy, Ltd.

#### Mazal Arie 10, Hod-Hasharon, Israel 45309

Tel/Fax: 972-77-5010792

Mobile: 972-52-8601517

E-Mail: <a href="mailto:shmueld33@gmail.com">shmueld33@gmail.com</a>

Company web site: www.sdle.co.il

Power Sources DataBase web site: <a href="www.batteriesdatabase.com">www.batteriesdatabase.com</a>

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