

Tip 71 – Using OLI Databanks in Unisim Design

Revised June 26, 2012

Introduction

Many times new or updated data is available from OLI Systems, Inc. When this occurs, a private (or user) databank is distributed.

Additional Links:

Install ESP Databases:

http://support.olisystems.com/TIPS/OLI-Tips11-Installing-ESP%20DB.pdf

Using ESP Databases:

http://support.olisystems.com/TIPS/OLI-Tips12-using-ESP-Private-Databases.PDF Once installed, the database must be made accessible to Unisim.

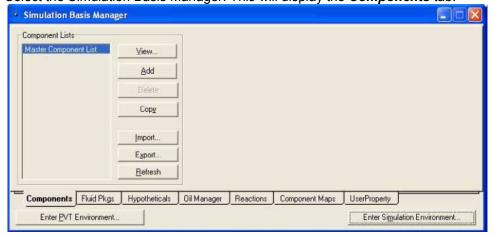
Assumptions:

- It is assumed that you have Unisim Design R360 or later and that you have the Alliance Suite for Unisim Design installed.
- This tip assumes you are already familiar with Unisim Design and can access the component views.

Accessing the OLI User Supplied Databank

Step 1:

Select the Simulation Basis Manager. This will display the Components tab.

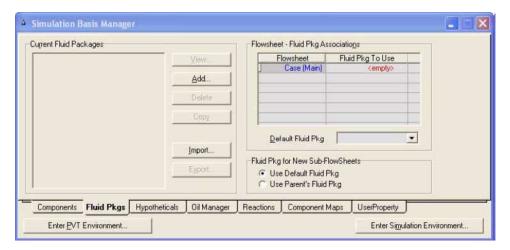


Click on Fluid Pkgs



Step 2:

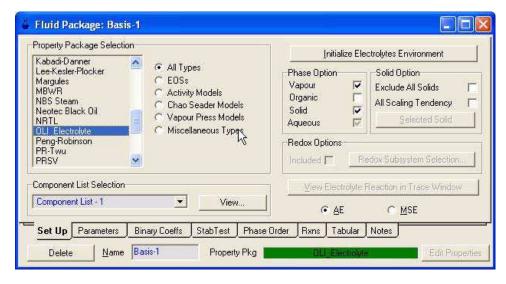
You now need to add a fluid package.



Click the Add Button.

Step 3:

Scroll down the list of Property Packages till you find **OLI Electrolyte**. The dialog will expand to show additional fields.

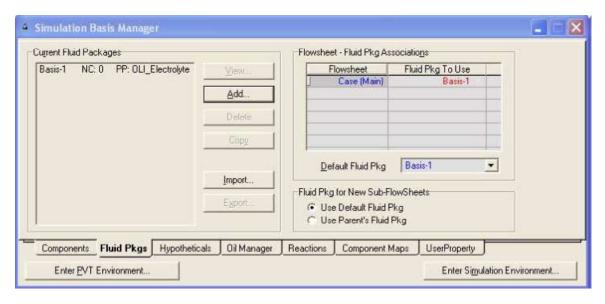


Choose your thermodynamic framework, the default is the Aqueous Electrolyte (AE). Change to the Mixed-Solvent Electrolyte (MSE) if desired.



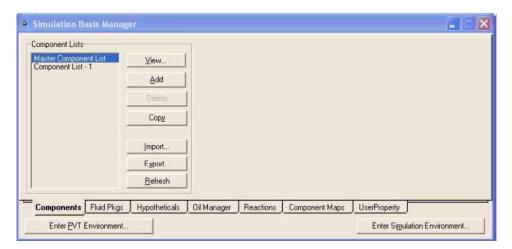
Step 4:

Click on the "x" to close this window. You will be returned to the current fluid packages window. Highlight the OLI Electrolyte line and then click the *Components* tab.



Step 5:

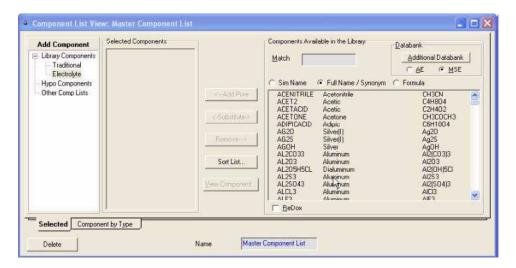
A new component list will appear. High light the new component list and then click the View button.





Step 6:

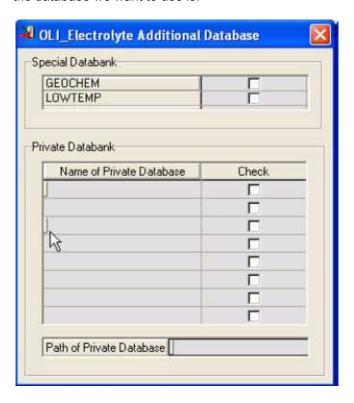
Two types of components will be displayed in the *Components* tree. Select *Electrolyte*. The window will expand to display more components. Click the *Full* radio button. The *Additional Databank* button should be visible. Click the button.



There are two radio buttons just below the *Additional Databank* button. The button AE selects the traditional Aqueous Electrolyte thermodynamic framework (default) and the MSE button selects the Mixed-solvent-Electrolyte thermodynamic framework. When you switch frameworks, you will only have access to databases created in the same framework. Otherwise a mis-match in data will occur. In our example the MSE button has been selected.

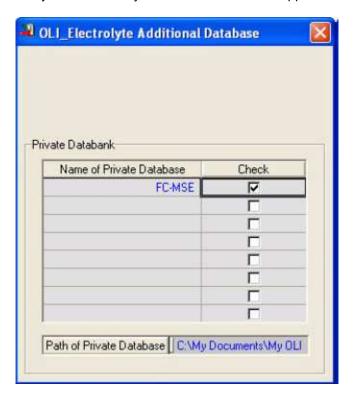
Step 7:

The procedure that works well is to first specify the path (or location) of the private database. In this example the database we want to use is:





C:\My Documents\My OLI Cases\Technical Support\OLI General\Applications\MultModel



Once you have entered the path, and it is accepted. Enter the name of the private database in the field. Here we have entered the name FC-MSE.

This must be a valid ESP format database. Finally we have checked the box to use this database. The Unisim Design program will indicate that it is reading a pure component database.

```
Reading OLI Pure component database
Building electrolyte databank library
Building electrolyte databank library
```

The program is now ready to use the new OLI database.

Occasionally the Unisim updater will put the new components at the end of the list.