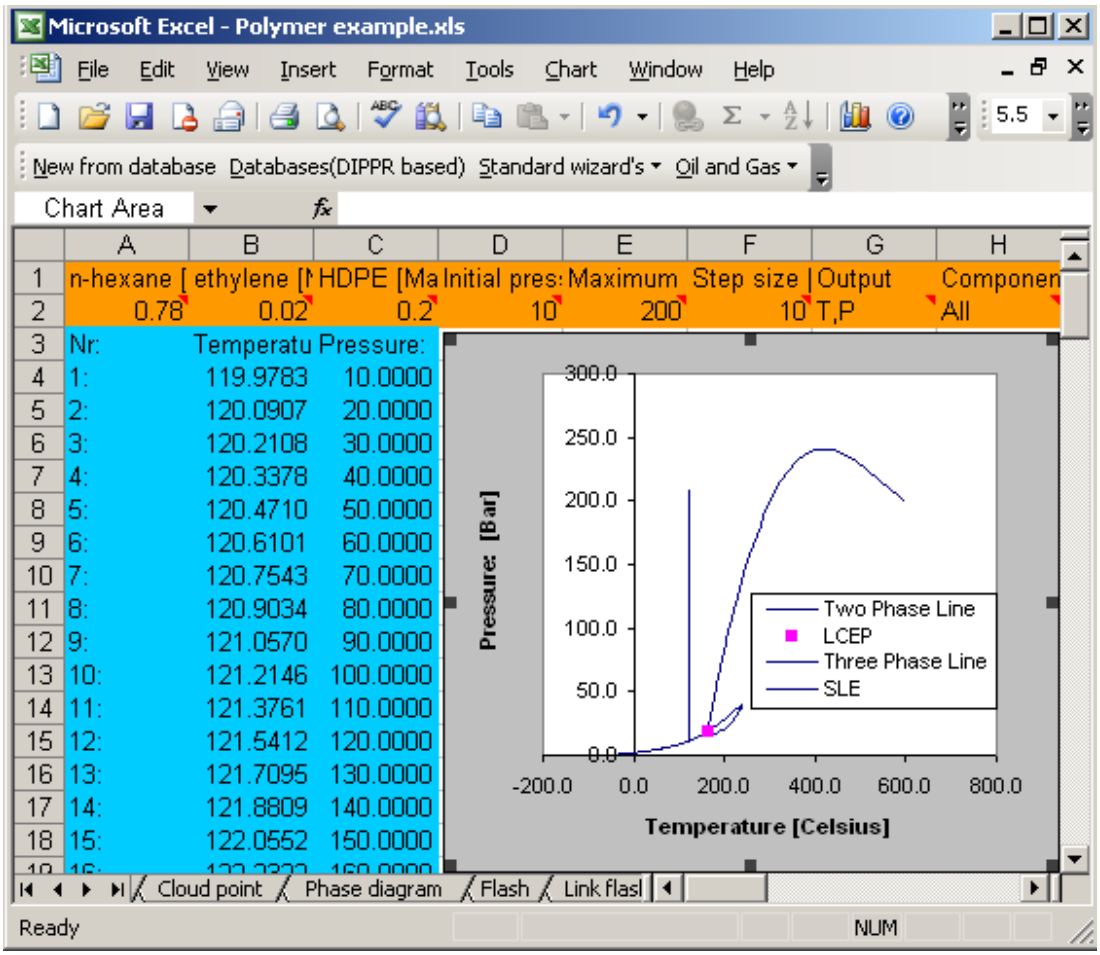
VLXE
THERMODYNAMIC SOLUTIONS

VLXE Excel Add in gives access to the calculations and databases with in Excel



VLXE For Polymers

Offers wide range of calculations for solvent polymer systems from setting up of project sheets to linkage of flash units

VLXE APS

VLXE
ADVANTAGES and MODELS

VLXE offers broad variety of computations for

Calculations	Applications
Flash Calculations	• Multi-phase flash, VLE, LLE and VLLE • Full range of flash's, (Pressure/Temperature, Pressure/Enthalpy, Pressure/Entropy + more). • No limit on the number of phases.
Link Flash	• Flash calculations can be linked in an Excel sheet to create a flow sheet.
Critical Point	• Allow to calculate the critical points found in a mixture no matter the type of mixture.
Cloud Point	• VLE and LLE
Phase Diagram	• Trace lines, critical point, spinodal curves for based on given feed and given temperature.
Txy/Pxy Curves	• These functions let the user to perform a Txy and Pxy calculations respectively for given systems.
SLE	• These functions perform SLE polymer mass fractions and SLE temperature.
Fit Parameters	• Both pure components and kij's

Thermodynamic Models

All phase equilibria calculations performed in VLXE are based on the use of cubic equations of state (EOS). Six EOS are included in VLXE. Depending on the EOS a different number of mixing rules are included.

Equation of States

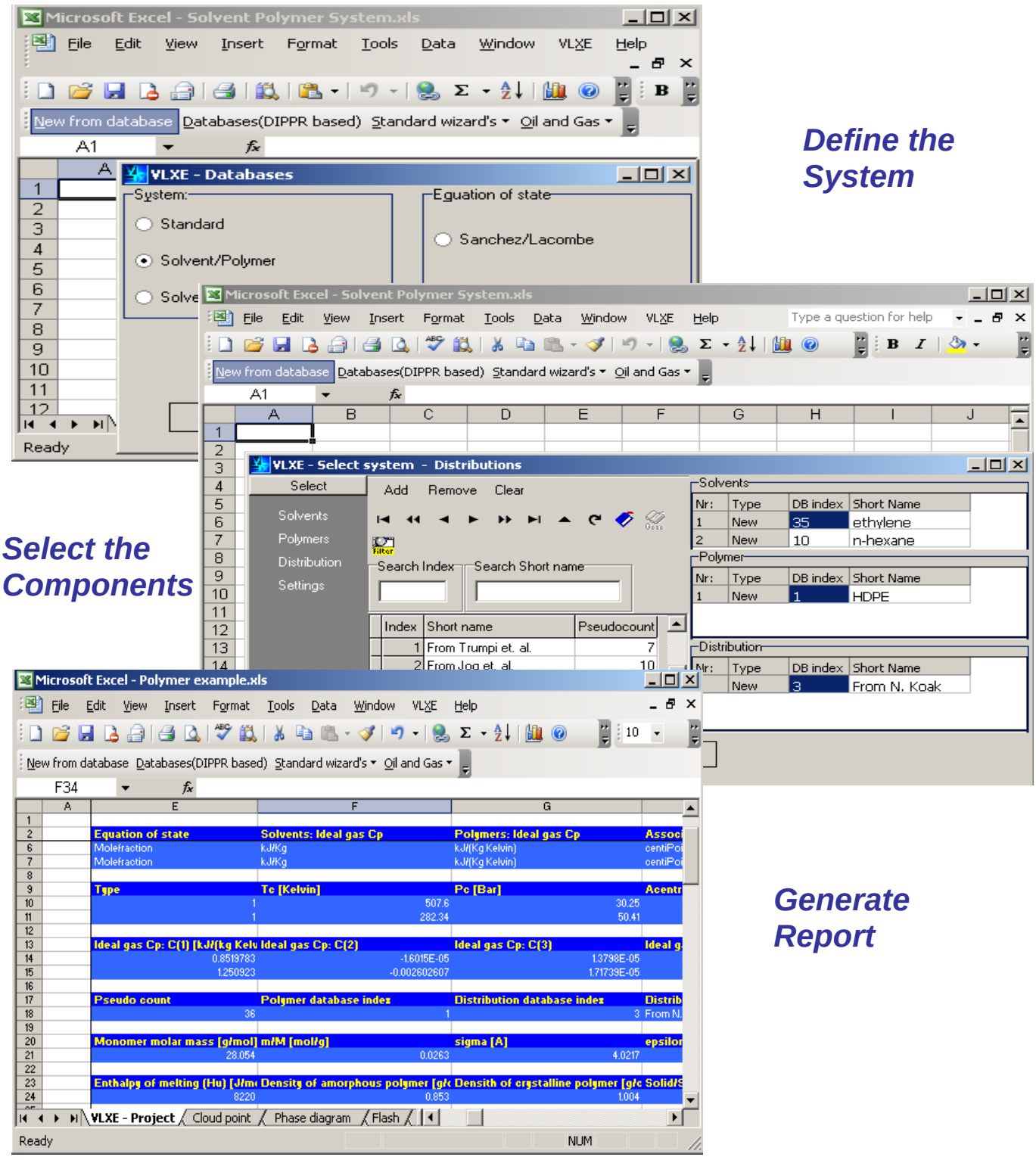
- Peng/Robinsen
- Soave/Redlick/Kwong
- Sanchez/Lacombe (Orignal)
- Sanchez/Lacombe (Ideal Gas Limit)
- PC-SAFT
- Copolymer PC-SAFT

Models For Ideal Gas Heat Capacity

- DIPPR
- Polynomial Expression

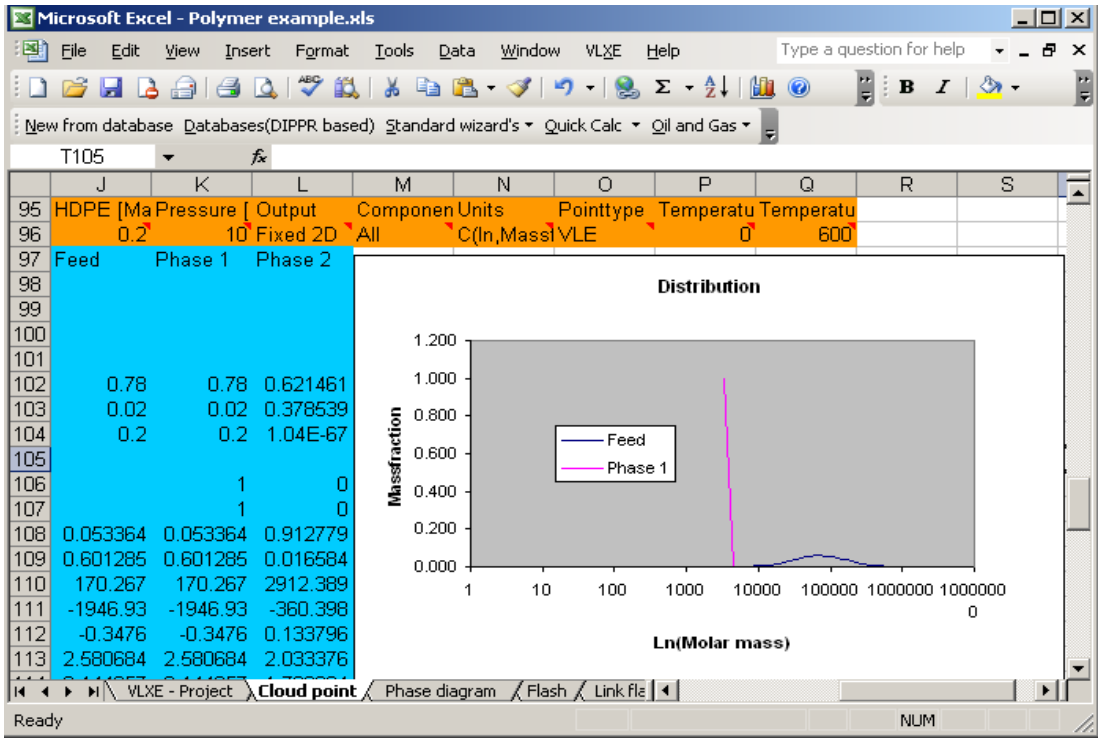
VLXE
For Excel Add in

Setting Up Of Project Is Simple and Robust Due To Excel Add In Features

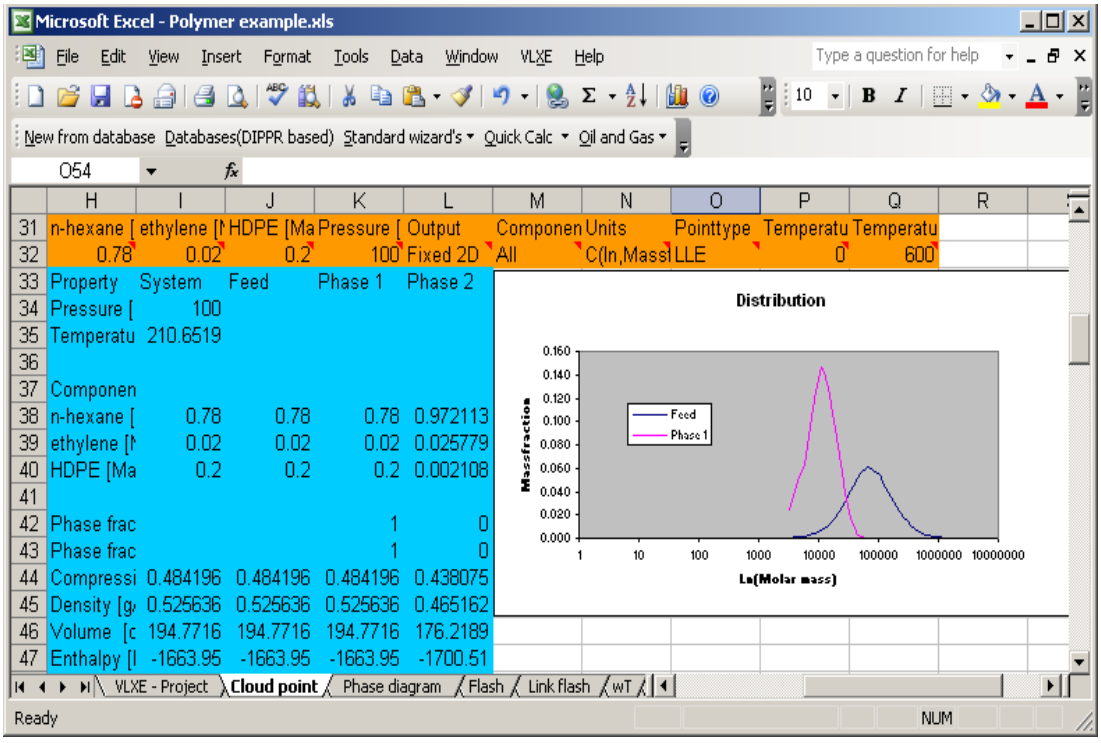


VLXE Examples
Cloud Point

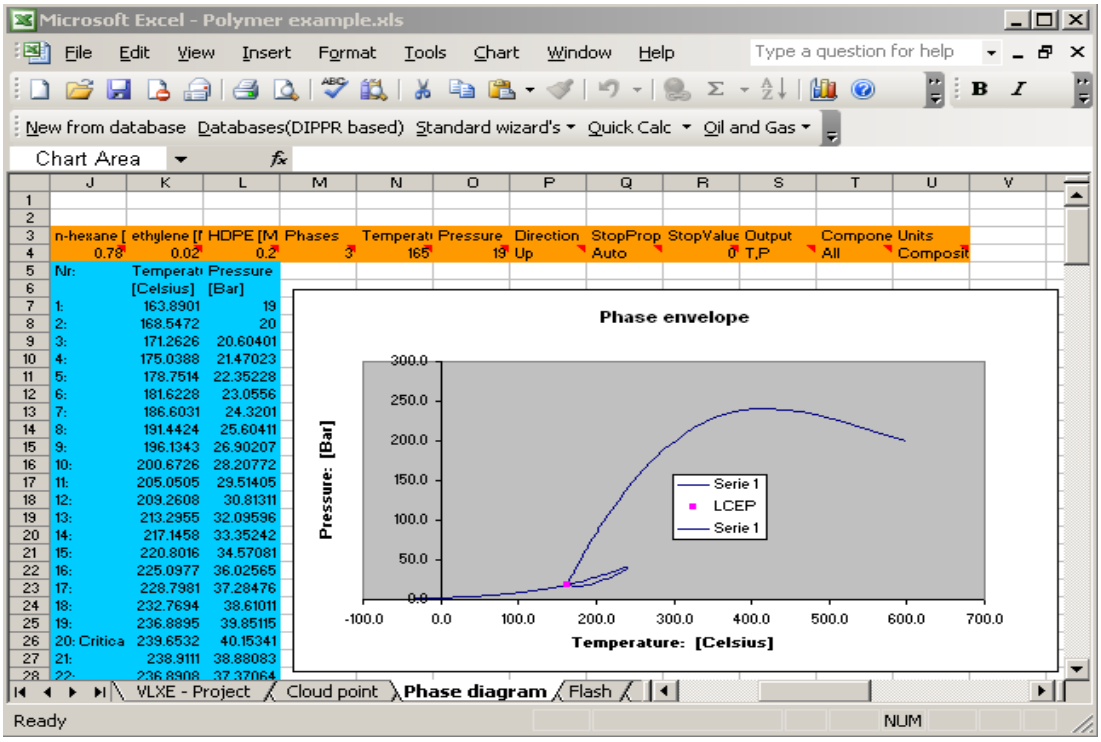
VLE



LLE

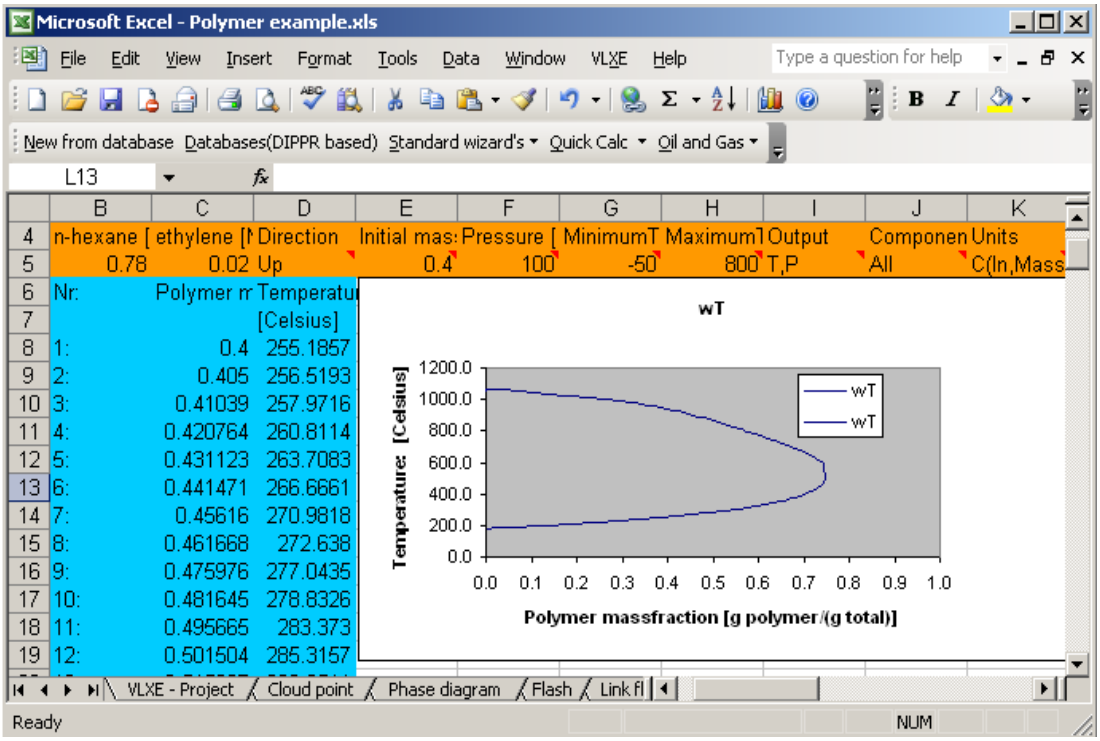


VLXE Examples
Phase Diagram

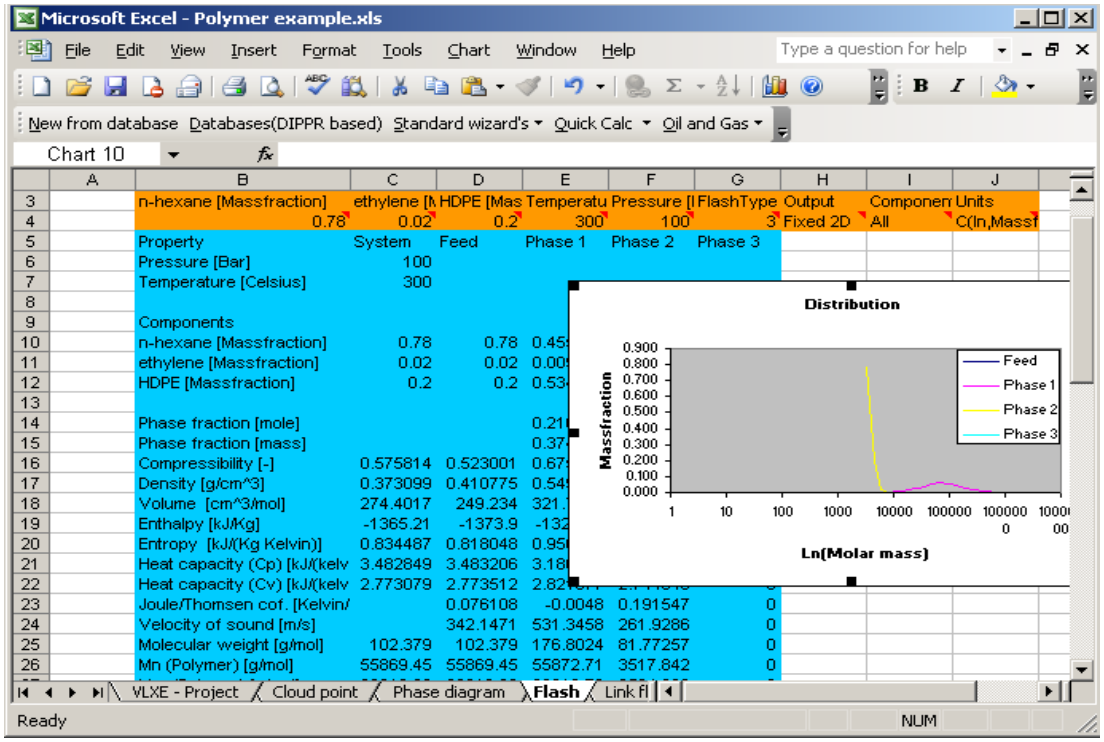


phase envelope

Polymer Mass Fraction Verses Temperature (Tw)

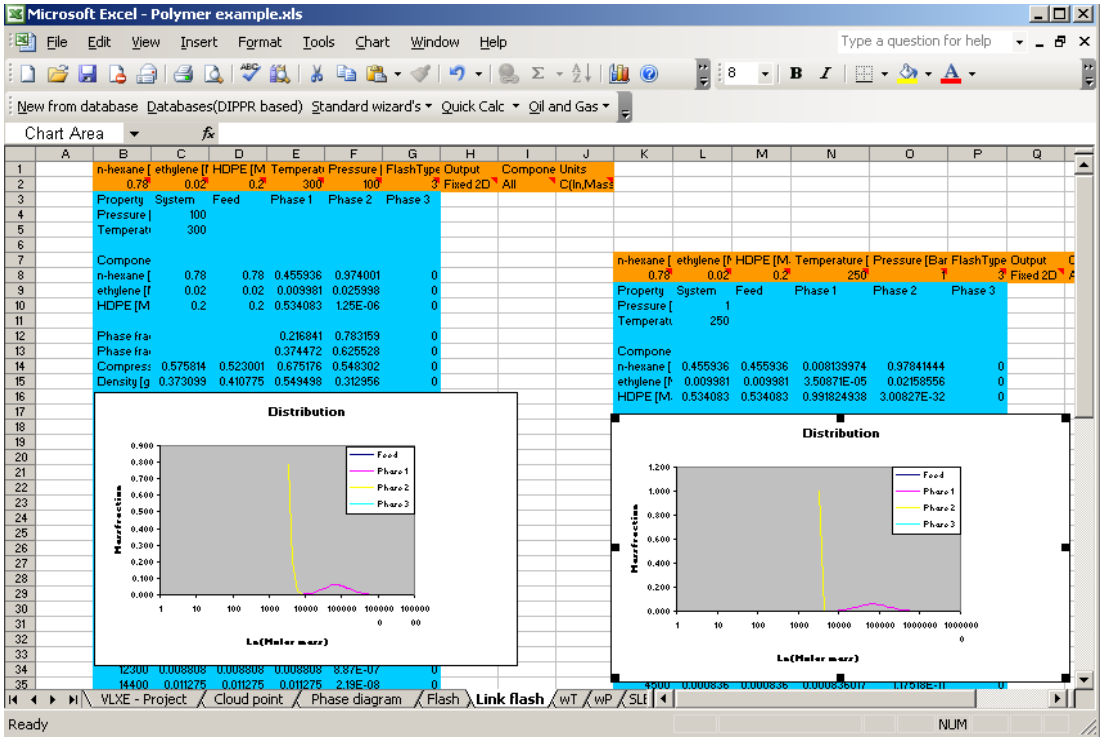


VLXE Examples
Flash Calculation

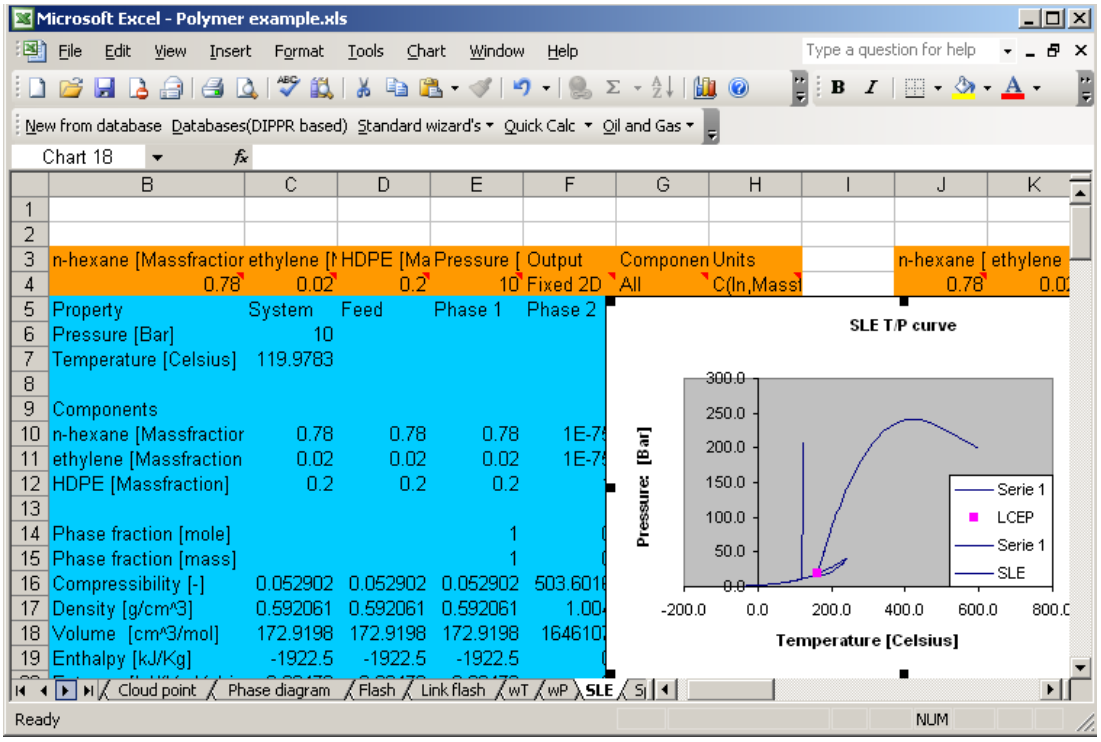


Flash Calculation

How to link Flash Calculation to create flow sheet

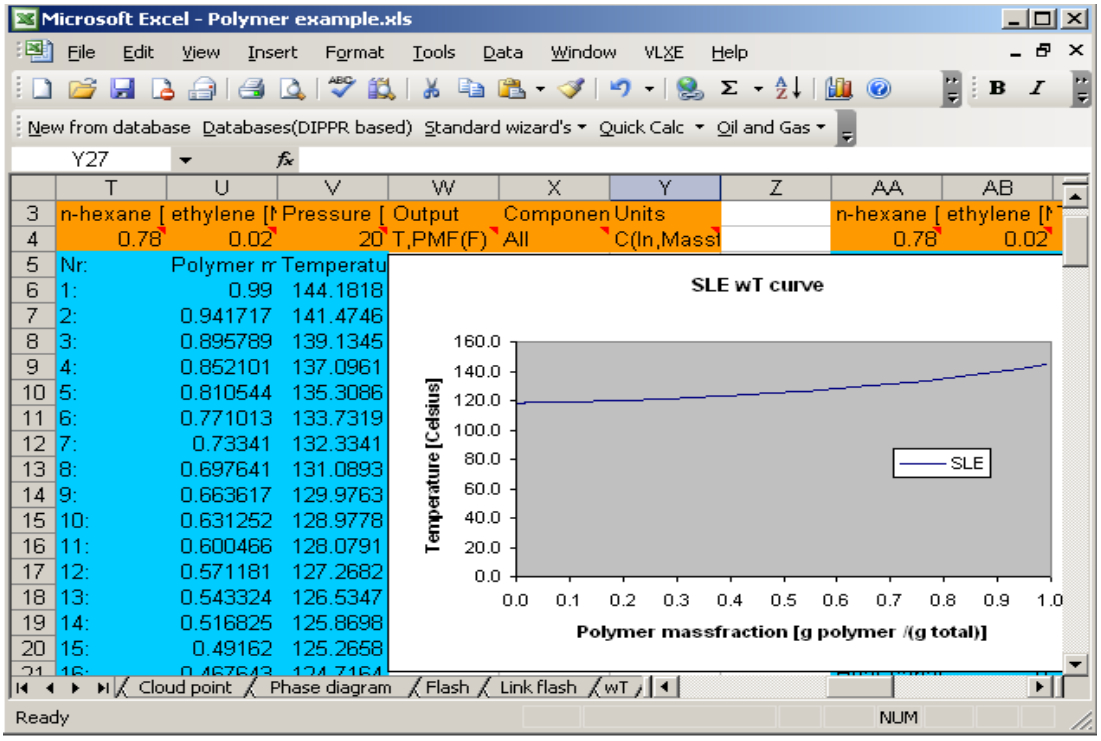


VLXE Examples
SLE

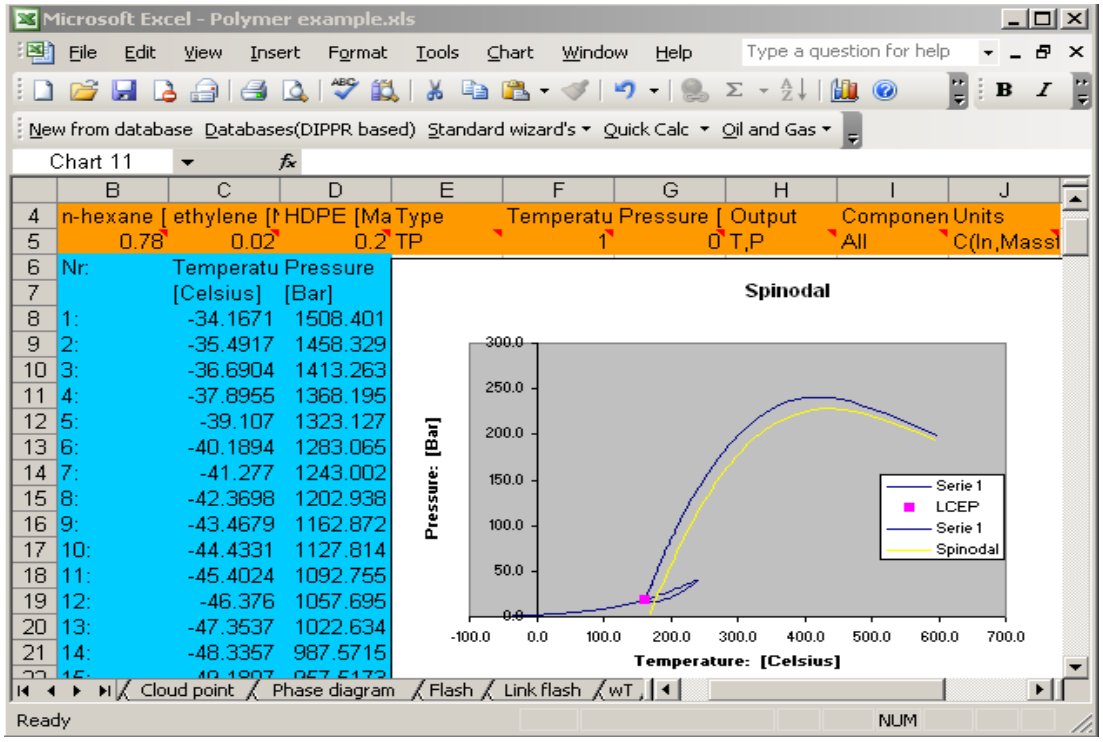


SLE T/P Curve

Effect of polymer mass fraction with temperature



VLXE Examples
Spinodal



Spinodal

VLXE is accessible on our website and may be downloaded. If you are interested and would like more information please contact VLXE by means of any of the following address

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