

“ The Extension of Electronic Resources into the Classroom and Beyond”



Reliable and relevant reference information – *f a s t*



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5.28.08

Awareness of Electronic Resources

- Tools of the classroom are changing! How to let them know?
 - Library
 - » How to get the news out!
 - Professor
 - » How much time necessary to learn?
 - » Part of my course plan?
 - » Is it part of the work environment?
 - Student
 - » Didn't know we had the tool?
 - » Is there assistance? Can it help with a job?
- Assistance – Yes, BUT! We can't do it alone!

Value of Electronic Resources

- Accessible – Location is less important
- Accurate – Content quality = Qualified results
- Current – New Versions Updated
- Flexible – Access authorized by the Library
- Relevant – Content is Focused
- Fast – Electronic access manages volume of data.

Electronic Resources –the effect on time

(Maximize Productivity, Minimize Cost, Increase Accuracy)

Time – Is it Free? NO!

Time acronym = This I Must Earn

Time Management affected by-

- Efficiency(tools – less cost)
- Project Management(tools – less cost).
- Hours of work(people – more cost)
- # of employees(people – more cost)
- Quality research(tools – less cost)
- Content Experience(tools – less cost)

Professor and the Student

Professor – Students Google first! Good decision? Quality in the results? Can we place eTools in our course plan?

Student – Benefits of eTools? Experienced in classwork? Can it be benefit to future?

Student needs to know of newer & better ways of getting the answers? Electronic Resources are here to stay. Must it wait for the experience?

Optimized Search Highlights

- Complete indexing of contents – text, tables, and graphs
- Unit converter finds data independent of specified search units
- Search criteria may contain both keywords and numeric values
- Search for exact numeric values or ranges of numeric values
- Search within reference library, subset, or single title

Optimized search: Industrial Chemicals

Knovel is ideal for searching for hazard-related properties

Flash Point: is not null (exists)

Use with Octane

DEFINE SEARCH CRITERIA:

Category:
hazard-related properties

Field Name:
flash point

Units:
°C

Operator:
is not null (exists)

Category:
keyword (default)

Field Name:
all text fields

Operator:
is (=)

Keyword(s):
octane

SEARCH QUERY:
(keyword="chemical">

SEARCH **RESET**

Optimized search: Industrial Chemicals

Knovel found 3 matching records in a table of 23429 rows

Dangerous Properties of Industrial Materials

Table: Dangerous Properties of Industrial Materials
Table Type: Interactive Table
Search Query: (flash point EXIST) and (octane)
Total Number of Search Hits: 3
Total Number of Rows: 23429

Pages: 1 Jump to: 1 of 1
Display: Data Found | [All Data](#)

Select Rows Filter Data in Table A-Z Sort Table Z-A Show/Hide Columns Change Column Order Print Table Export Table View Table Notes Back To Table of Contents Unit Converter Help

<input checked="" type="checkbox"/>	no.	entry code	material or substance name	synonyms	mol. formula	CAS Registry No.	DOT no.	mol. weight	SAX hazard rating	b.p. (°C)	melting point (°C)	flash point (°C)	text	no.
<input type="checkbox"/>	11794	GCA000	gasoline (100-130 octane)						3			-46	view text	11794
<input type="checkbox"/>	11795	GCC000	gasoline (115-145 octane)						3			-46	view text	11795
<input type="checkbox"/>	17492	OCU000	octane	view synonyms	C ₈ H ₁₈	111-65-9	UN 1262	114.26	3	125.8		13	view text	17492

Sax's Dangerous Properties of Industrial Materials (10th Edition) Volumes 1-3
© 2000 John Wiley & Sons

Optimized search and interactivity

- Optimized for engineering search
 - Finds data in tables, graphs, & equations
 - Automatic unit conversion
 - Search for numeric ranges
- Interactive tools for utilizing information
 - Plot points on graphs
 - Manipulate data in spreadsheet like environment

Interactive Features

- **Interactive Tables**



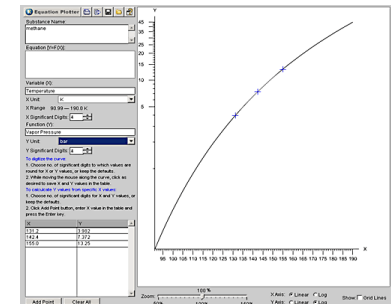
- Find, customize, and manipulate data as you would with a spreadsheet

- **Equation Plotters**



- Plot your points on the graph curve or enter values into the corresponding X-Y table to see where they fall on the curve
- Export and print data and/or graphs

Interactive Tables



Equation Plotters

Interactive Tables

Interactive Table - Physical & Typical Mechanical Properties

Table: Interactive Table - Physical & Typical Mechanical Properties
 Table Type: Interactive Table
 Search Query: (material or substance name = aluminum) and (the
 Total Number of Search Hits: 209
 Total Number of Rows: 1466
 Number of Hidden Columns: 4

The Interactive Table has spreadsheet features – you can sort the rows and hide columns, and change the column order to focus on the relevant data

Select Rows
 Filter Data in Table
 A-Z Sort Z-A Table
 Show / Hide Columns
 Change Column Order
 Print Table
 Export Table
 View Table Notes
 Back To Table of Contents
 Unit Converter
 ?

<input checked="" type="checkbox"/>	no.	alloy type	alloy name	UNS no.	form	condition or temper	E (10 ³ ksi)	E _c (10 ³ ksi)	G (10 ³ ksi)	μ	ρ (lb/in ³)	(Btu
<input type="checkbox"/>	455	Aluminum Alloy (Wrought)	2124	A92124	Plate	T851	10.4	10.9	4.0	0.33	0.100	0.2 21
<input type="checkbox"/>	456	Aluminum Alloy (Wrought)	2124	A92124	Plate	T851	10.4	10.9	4.0	0.33	0.100	0.2 21
<input type="checkbox"/>	457	Aluminum Alloy (Wrought)	2124	A92124	Plate	T851	10.4	10.9	4.0	0.33	0.100	0.2 21
<input type="checkbox"/>	458	Aluminum Alloy (Wrought)	2124	A92124	Plate	T851	10.4	10.9	4.0	0.33	0.100	0.2 21
<input type="checkbox"/>	459	Aluminum Alloy (Wrought)	2124	A92124	Plate	T851	10.4	10.9	4.0	0.33	0.100	0.2 21

Interactive Tables

Interactive Table - Physical & Typical Mechanical Properties

Table: Interactive Table - Physical & Typical Mechanical Properties

Table Type: Interactive Table

Search Query: (material or substance name = aluminum) and (thermal expansion coeff. EXISTS)

Total Number of Search Hits: 209

Total Number of Rows: 1466

Number of Hidden Columns: 4

Select Rows
 Filter Data in Table
 Sort Table
 Show / Hide Columns
 Change Column Order
 Print Table
 Export Table
 View Table Notes
 Back To Table of Contents
 Unit Converter
 ?

<input checked="" type="checkbox"/>	no.	alloy type	alloy name	UNS no.	form	condition or temper	E (10 ³ ksi)	E _c (10 ³ ksi)	G (10 ³ ksi)	μ	α (lb/in ³)	(Btu
<input type="checkbox"/>	455	Aluminum Alloy (Wrought)										0.2 21
<input type="checkbox"/>	456	Aluminum Alloy (Wrought)										0.2 21
<input type="checkbox"/>	457	Aluminum Alloy (Wrought)										0.2 21
<input type="checkbox"/>	458	Aluminum Alloy (Wrought)	2124	A92124	Plate	T851	10.4	10.9	4.0	0.33	0.100	0.2 21
<input type="checkbox"/>	459	Aluminum Alloy (Wrought)	2124	A92124	Plate	T851	10.4	10.9	4.0	0.33	0.100	0.2 21

Interactive Tables also allow filtering by attribute (column) and provide a convenient unit converter for use within the table

Equation Plotters


Table 2-6 Vapor Pressure of Inorganic and Organic Liquids

Table: Table 2-6 Vapor Pressure of Inorganic and Organic Liquids
 Table Type: Interactive Table
 Search Query: ("vapor pressure" and toluene)
 Total Number of Search Hits: 1
 Total Number of Rows: 231

Pages: 1 Jump to: 1 of 1 **GO**
 Data Found | [All Data](#)

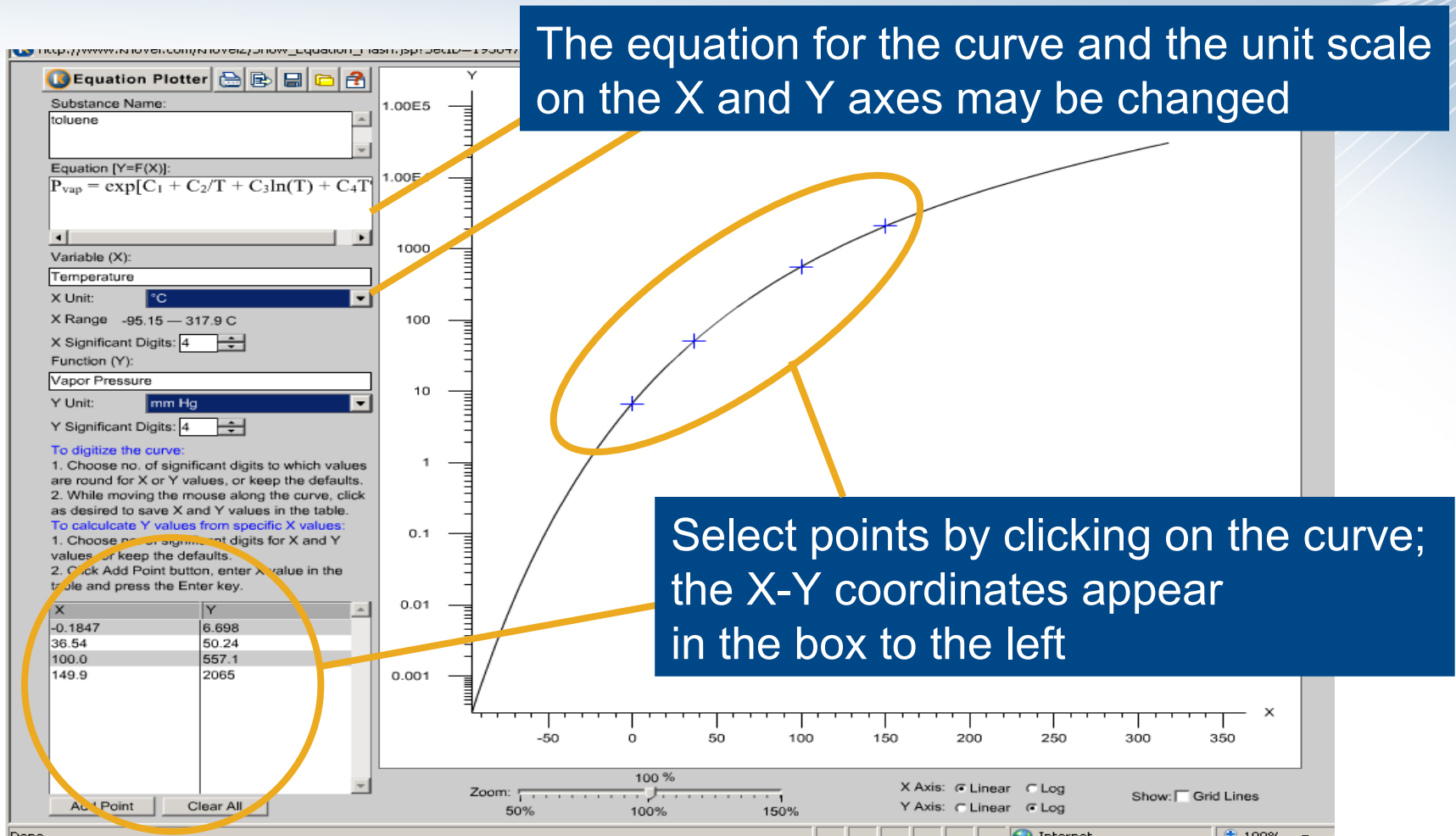
This table contains an Equation Plotter associated with the substance toluene

Select Rows Filter Data in Table A-Z Sort Z-A Table Show/Hide Columns Change Column Order Print Table Export Table View Associated Text Back To Table of Contents Unit Converter Help

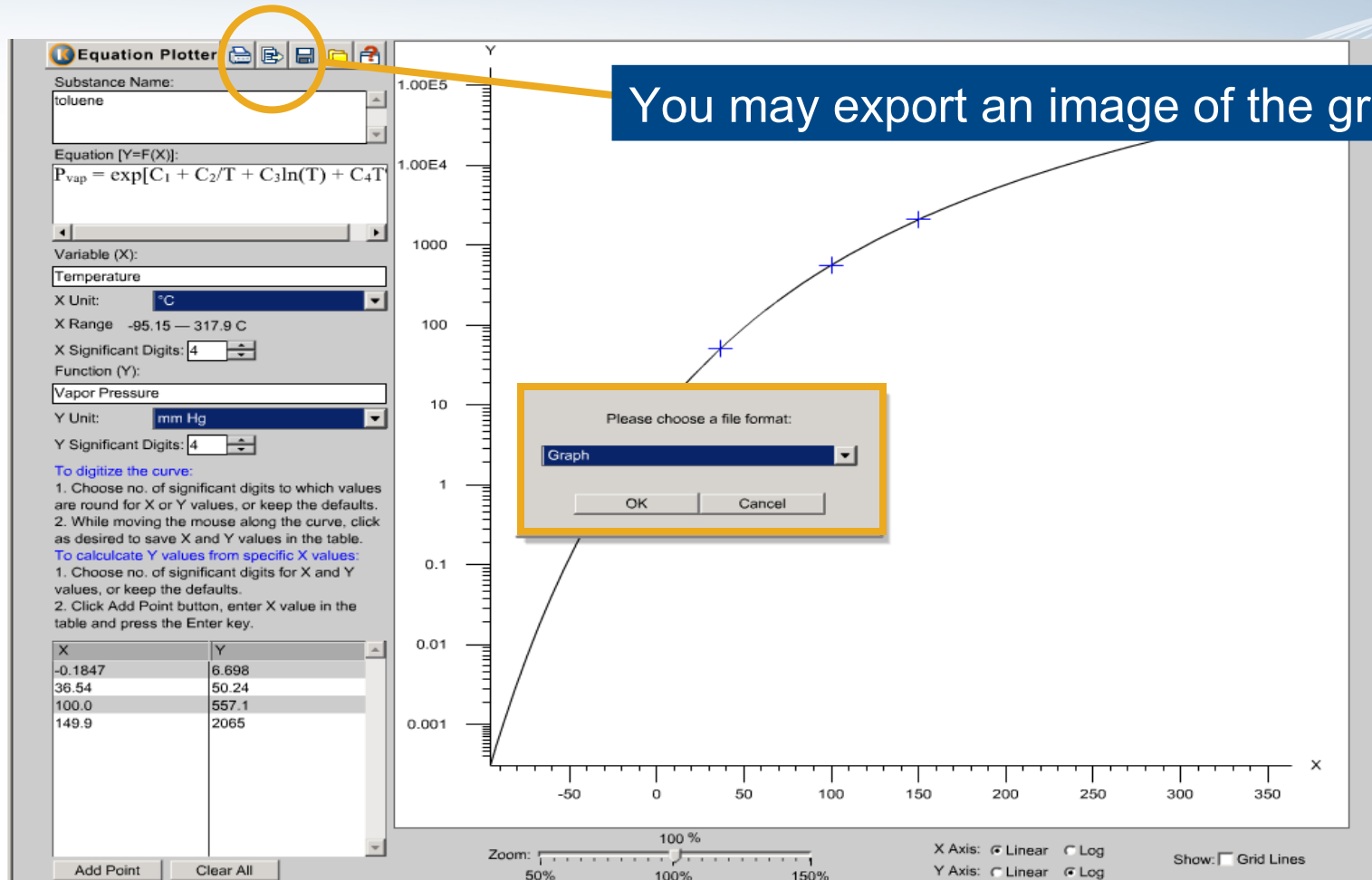
<input checked="" type="checkbox"/>	no.	equation plotter	material or substance name	mol. formula	CAS no.	C1	C2	C3	C4	C5	min. temp. (K)	vapor pressure @ min. temp. (Pa)	max. temp. (K)	vapor pressure @ max. temp. (Pa)	no.
<input type="checkbox"/>	68		toluene	C ₇ H ₈	108-88-3	80.877	-6902.4	-8.7761	5.8034E-06	2	178.18	4.2348E-02	591.8	4.1012E+06	68

Perry's Chemical Engineers' Handbook (7th Edition)
 © 1997 McGraw-Hill

Equation Plotters



Equation Plotters



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“I can believe that Knovel has been voted 'product of the year'. I have never worked with a company that is so responsive to the customer's questions or wishes.”

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“Knovel provides our faculty with a comprehensive suite of engineering resources of the highest quality. The search interface caters skilfully for differing levels of information need. Knovel provides a firm foundation for our undergraduate cohorts and an invaluable information source for experienced technologists and researchers.”

Ann McSweeney, Senior Librarian, Dublin Institute of Technology

"I find Knovel to be unique in its capacity to be dynamic and interactive. To me, it seems like the next generation of e-books is already here, and I'm just waiting for the others to catch up!"

Domenic Iannello, Datasets Librarian, RMIT University Library

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