



Helping Leading Universities Better Prepare Engineering Students



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

Knovel Online Reference Collection: Boosting Engineering Students' Productivity and Marketability

The challenges facing engineering students today are mounting. The body of engineering knowledge they must master continues to expand. Recruiters increasingly expect new hires to have pragmatic training so they can hit the ground running. And the continuing shifts in employment opportunities mean that your graduates will need to continually refresh their areas of expertise throughout their careers.

Access to a collection of online reference material is becoming mandatory for engineering students to quickly locate the appropriate background material, material properties, formulations, and equations they need to address specific problems they are tackling in their courses and in their careers.

Why Knovel is the Leading Online Technical Reference Collection

Knovel's online collection of authoritative science and technology references is used by students, academics and practitioners around the world to help subscribers quickly locate relevant and reliable technical information. Knovel's thousands of subscribers include over 290 leading engineering and science universities worldwide, including **62% of the top 50 universities in the world and 80% of the top US engineering schools**. With Knovel's impact on enhancing the engineering student experience and increasing the interest of employers in graduating engineers, it's not surprising that 99% of Knovel's academic subscribers renew each year.

Knovel indexes all content—including tables and charts—and automatically converts units to deliver all relevant results. Knovel's grasp of technical context prioritizes results so students aren't forced to wade through irrelevant responses. And Knovel's interactive tools help students use the resulting data more productively.

www.knovel.com

How Knovel Provides Fast Access to More Reliable and Relevant Reference Information

16 Comprehensive Content from Relevant Sources

Knovel's content includes material properties, process and design information, best practices, equations, and formulations. Knovel's collection is approaching 2,000 leading reference works and databases from over 40 international publishers and professional societies. And the list doubles every two years.

Content Reflects Subscriber and Industry Expert Advice

Knovel turns to leading industry experts, companies, academics and librarians to help guide content selection for each discipline. To meet specific customer needs, we will even track down out-of-print references, secure the rights, and digitize the content to add it to our collection.

16 Optimized Search Returns More Relevant Results, More Precisely

The ideal search returns a narrow set of highly relevant results from the broadest possible collection of sources. Thanks to its unique set of optimized search capabilities, Knovel returns more precisely relevant results than any other online collection available today.

Precisely Index All Content – Not Just Text

Knovel indexes all content, including information contained in tables, graphs, charts and figures. And, unlike most online reference collections, if what you're searching for is buried in a table or database, Knovel will return just the relevant rows. With the help of Knovel, you no longer have to hunt through hundreds of rows of a table to locate the four rows of interest to you.

Be Smart About Units

By design, Knovel is smart about units. If you search for a value in lb/ft^3 , Knovel will find the relevant results even if they are published in g/cm^3 . By handling conversions between hundreds of unit types, Knovel ensures more complete results for higher productivity and more efficient problem-solving.

Laser In On Relevant Answers

Leveraging expertise about how engineering students and staff search, Knovel is able to narrow results down to the most precisely relevant set. Unlike other online reference collections, Knovel allows searchers to specify a range of values of interest, such as a material with a boiling point between 0 and 10 degrees Fahrenheit. And Knovel understands the difference between properties like tensile strength and stress intensity—even when both are reported in kPa values or any other equivalent scale. Similarly, thanks to Knovel's inherent understanding of material properties, searches for polyester will return polyethylene terephthalate (PET) and polybutylene terephthalate (PBT) hits even when the term "polyester" is nowhere on the page.

16 How Knovel's Interactive Tools Reduce Human Error

Knovel makes it easy to use search results—whether you're simply printing out responses, excerpting background material, extracting key values or using formulas—without introducing human error. Citations are inserted in exported data to facilitate future recall of the material's source and to ensure that assignments are referenced correctly.

Interactive Tables – Work With Just the Relevant Rows and Columns

With Knovel's interactive tables you can show or hide rows and columns, change their order, and easily export the desired set of cells to a spreadsheet with the source citation included for easy tracking of work results. The ability to only export relevant rows and columns to Excel eliminates the need for spreadsheet clean-up before you can use the relevant values.

Interactive Graphs Help Extract Precise Coordinates

Using Knovel's equation plotter, you can simply select the values of interest on the curve and export them to Excel for further manipulation—with the source citation included. The coordinates of a point are automatically displayed and ready for export, thereby eliminating tedious and error-prone estimates.

"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!"

– DATASETS LIBRARIAN, RMIT UNIVERSITY LIBRARY

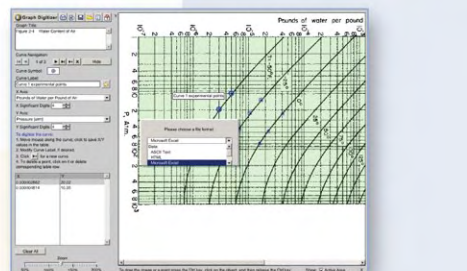


Table: Chemical Compounds (Physical) - C Tables
Table Type: Interaction Table
Search Query: alcohol and molecular formula = C4 and 150 -- boiling point = 250 F
Total Number of Search Hits: 8
Total Number of Rows: 7

mol. formula	synonyms	mol. formula	common formula	boiling point (°C)	CAS Registry No.	mol. weight	melting point (°C)	sp. gravity	refractive index	source group no.	mol. wt.
C ₄ H ₁₀	tert-butyl alcohol	C ₄ H ₁₀	(CH ₃) ₃ COH	82.6	75-65-0	74.077	25.6	0.789	1.387	W1.1.2	88.0
C ₄ H ₈ O	n-butyl mercaptan	C ₄ H ₈ S	C ₄ H ₉ SH	98	100-79-9	88.142	-74	0.808		W1.1.6	88.0
C ₄ H ₁₀ O	sec-butyl alcohol	C ₄ H ₁₀ O	C ₄ H ₉ CHOH	99.5	78-52-2	74.077		0.808	1.387	W1.1.6	88.0
C ₄ H ₁₀ O	isobutyl alcohol	C ₄ H ₁₀ O	(CH ₃) ₂ CHCH ₂ OH	107.3	78-63-1	74.077	-106	0.802	1.396	W1.1.6	88.0
C ₄ H ₈ O	vinylbutyl alcohol	C ₄ H ₈ O	CH ₂ =CHCH ₂ CH ₂ OH	114		72.062		0.850		W1.1.6	88.0
C ₄ H ₈ O	1-butyl alcohol	C ₄ H ₁₀ O	C ₄ H ₉ OH	117.7	71-36-3	74.077	-99.8	0.819	1.393	W1.1.6	88.0
C ₄ H ₈ O	octyl alcohol	C ₈ H ₁₈ O	CH ₃ (CH ₂) ₆ CH ₂ OH	150	8119-91-9	72.062				W1.1.6	154.0

International Critical Tables of Numerical Data, Physics, Chemistry and Technology (1974) 1026-1930 2000 (1974)

- 1-bercapotbutane
- 1-butanethiol
- 1-butyl mercaptan
- 1-mercapotbutane
- butane-1-thiol
- butanethiol
- butyl mercaptan
- butylthiol
- n-butanethiol
- n-butyl mercaptan
- n-butyl thioalcohol
- n-butylthiol
- normal butyl thioalcohol
- thiobutyl alcohol



No-Risk Free Trial

Find out how Knovel can help your students tackle their work more productively and increase their marketability by providing them with access to reliable engineering and technical information with unprecedented speed and ease.

Knovel equips students with state-of-the-art skills that make them more attractive to recruiters. Hundreds of leading firms around the globe, including over 70 of the Fortune 500 equip their engineers with Knovel to increase their productivity and bring innovative products to market faster.

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