

Characteristics on the database: Knovel Library

Content

Database of full-text e-books and other interactive tools. The subscription allows to access approximately **11 000 book titles** that can be searched in full text **in 20 thematic collections**:

Aerospace & Radar Technology (684)	Mechanics & Mechanical Engineering (1055)
Biochemistry, Biology & Biotechnology (305)	Metals & Metallurgy (724)
Chemistry & Chemical Engineering (939)	Nanotechnology (207)
Civil Engineering & Construction Materials (1087)	Oil & Gas Engineering (885)
Electrical & Power Engineering (479)	Plastics & Rubbers (604)
Electronics & Semiconductors (669)	Regulatory Information (4)
Fire Protection Engineering& Emergency Response (124)	Sustainable Energy & Development (638)
Food Science (489)	Try Knovel (244)
General Engineering and Projec Administration (1262)	Knovel Sampler (132)
Industrial Engineering & Operations Management (393)	
ASM International Materials Collection (71) – Premium collection	

Search

Video Tutorials – searching with the use of specialized capabilities of the Knovel database:

- 1. Material Property Search
- 2. Property Table Data
- **3.** Equations
- 4. Knovel Quick Start Guide

Bases and tools integrated with the Knovel database:



1. Knovel Data Analytics – NIST Standard Reference Database 103b is a large electronic database containing detailed descriptions and property data for approximately 27,000 pure compounds. The chemicals are described by relevant metadata, and expert software-generated recommended property data based on approximately 5.6 million experimental thermophysical and thermochemical property data points and their uncertainties.



2. MatWeb Ceramics Material Data Sheets – contains reference data for 8,678 ceramic materials. These materials fall under twenty types with various sub-types, including Ceramic, Aerogel, Boride Carbide, Ceramic Matrix Composite, Clay, Concrete, Glass, Glaze, Halide, High Temp Ceramic Resin, Hydride Machinable Ceramic, Nitride Oxide, Phosphide/Pnictide, Piezoelectric, Potting/Casting Ceramic, Slurry, Sulfide/Chalcogenide. The reference data in the Database is organized and presented for viewing in two ways, i.e. interactive tables in US Customary and Metric formats and HTML material datasheets.



3. MatWeb Composite Material Data Sheets – contains reference data for almost 1,500 composite materials. These materials fall under nine types: Carbon Fiber/Thermoset Composite, Ceramic Matrix Composite, Composite Core Material, Composite Fibers, Composite SMC, Epoxy/Carbon Fiber Composite, Metal Matrix Composite, Phenolic, Carbon Fiber Composite and Phenolic, Graphite Cloth Composite.





4. MatWeb Fluids Material Data Sheets - contains reference data for almost 6,150 Fluid materials. These materials fall under three types, namely Lubricant (with 18 subcategories), Quenchant and Solvent. The reference data in the Database is organized and presented for viewing in two ways, i.e. interactive tables in US Customary and Metric formats and HTML material datasheets.



5. MatWeb Metal Material Data Sheets – contains over 15,000 material data sheets (MDS) for ferrous and nonferrous groups, electronic/magnetic alloy, intermetallic, metal matrix composite and metal foam, mesh or honeycomb. Ferrous includes all varieties of steel and iron. Nonferrous include aluminum, copper, nickel, zinc, precious metals and other non-iron based alloys. There are two data tables, one in US Customary Units, one Metric, with basic properties and links to MDS making it easy to filter, sort, and search for specific materials or properties. Most groups have overviews summarizing the properties, processing methods and applications, which are available in the Category Overview Datasheets section. Most properties in tables and MDS are field searchable. MDS can be opened from the Table of Contents page and from links in the interactive tables, and all data from the MDS are indexed in the Knovel Material Property Search to support numeric value search.



6. MatWeb Plastic Material Data Sheets - This newly updated version of MatWeb Plastic Material Data Sheets (MDS) has been expanded to include additional 28,000 new datasheets for a total of more than 55,000 plastic materials. The majority of the materials (more than 90 %) fall under two main types, namely thermoplastics and thermosets. Thermoplastics include nylons, polyesters, polyethylenes, polypropylenes, ABS and thermoplastic elastomers. Thermosets include polyurethanes, epoxies, phenolics and polyesters.

Access

Online

Additional possibilities Knovel platform's The Knovel Library offers the possibility of individual registration (in the **My Knovel** tab) and allows you to set up an **individual MyKnovel** account.

Registration is possible only from computers of the university network with an email address from university domains (put.poznan.pl; doctorate.put.poznan.pl; student.put.poznan.pl).

Individual account in My Knovel allows to:

- remote access from outside the university network,
- creating and organizing your own folders,
- sharing folders with selected users,
- saving the titles and content of your favorite books,
- saving your search history and search queries,
- downloading PDF files to mobile devices for offline work (download the free Knovel To Go app from Google Play, App Store or Download Android Installer).

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