DETHERM   Thermophysical database
at the Physical Sciences Data-science Service

What is DETHERM?

DETHERM is one of the **largest thermophysical databases in the world** containing:

- 11,300,000 data sets
- 163,000 mixtures
- 60,600 pure compounds

What sort of data is present?

The data present in DETHERM is broadly classed as **thermophysical**:

Phase equilibrium (activity coefficients, gas solubilities)

Azeotropic data

Excess properties (enthalpies, heat capacities, volumes)

Pure component properties

Caloric and acoustic properties

Electrochemical properties

Pressure-Volume-Temperature (PVT) properties

Transport properties

Surface properties

Thermal conductivities

Viscosities

Solubilities

Diffusion Coefficients

Eutectical Data

Access DETHERM via the

Physical Sciences Data-science Service

at www.psds.ac.uk   email: info@psds.ac.uk

DETHERM Thermophysical database

How can I search DETHERM?

DETHERM allows the searching of **pure substances** and **mixtures**.

Search for components and define a mixture:

Name		(e.g. ethanol)
Sum formula		(e.g. C2H6*)
CAS-Nr		(e.g. 64-17-5)

[Search] [Clear]

- Enter a *Name* or a *Sum Formula* or a *CAS-Nr* to search for substances.
- You can use the * wildcard with names and sum formulae.
- Enter a *Name* **and** a *Sum Formula* string to search for substances that should match **both** criteria.
- A field accepts multiple search strings separated by a ;.

Where does the data come from?

The complete DETHERM database consists of **externally maintained packages**:

Electrolyte Data Collection (**ELDAR**)	Dortmund Data Bank (**DDB**)
Thermophysical Database (**INFOTHERM**)	Data Collection (**C-DATA**)
Thermophysical Parameter Database (**COMDOR**)	Solubility Database (**CAPEC-SDB**)

How do I access DETHERM?

DETHERM is provided to the UK academic community via the **PSDS at www.psds.ac.uk**. DETHERM has been developed by DECHEMA e.V. The Physical Sciences Data-science Service is funded by the EPSRC.

Access is authenticated by UK academic IP address via **www.psds.ac.uk**. For off-campus working, a PSDS username / password will be issued.

Access DETHERM via the

Physical Sciences Data-science Service

at www.psds.ac.uk   email: info@psds.ac.uk