The Data Bank can be contacted through the NEA web site at www.nea.fr

Other means of contact are:

Letter: OECD Nuclear Energy Agency
12, boulevard des Îles
92130 Issy-les-Moulineaux
FRANCE
Telephone: +33 (0)1 45 24 10 71
Fax: +33 (0)1 45 24 11 10
E-mail: nea@nea.fr

Access to NEA Web pages

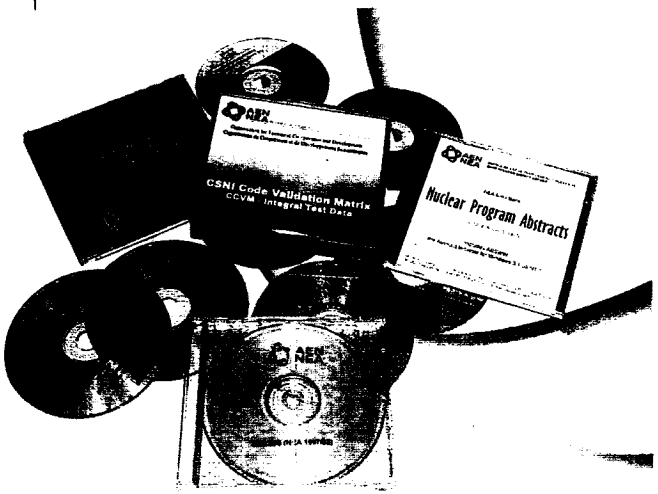
Users have open access to the NEA and Data Bank home pages, and to information about the NEA's aims and organisation. Information is available about work on nuclear safety, radiation protection, management of radioactive waste, nuclear law, nuclear development, nuclear science and the Data Bank, public information and publications.

Access to scientific data and computer programs

The Computer Program Abstracts database is freely accessible via the Data Bank home page, as are nuclear structure data and references. User registration is needed to access other nuclear and chemical databases, and can be done on-line. Computer programs can be supplied only to institutions nominated by national delegates to the NEA Nuclear Science Committee. Users should request programs through the Liaison Officer of their institute (see the list on www.nea.fr/html/dbprog/pretlo.cgi).

OECD

Data bank



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AEN NEA

NUCLEAR ENERGY AGENCY

The Nuclear Energy Agency (NEA) is a special agency of the Organisation for Economic Co-operation and Development (OECD) in Paris. Its main objective is to promote international co-operation with the goal of assisting Member countries in maintaining and further developing the scientific, technological and legal bases required for a safe, environmentally friendly and economical use of nuclear energy for peaceful purposes.

Within the NEA, the Data Bank has been established as an international centre of reference for its Member countries with respect to basic nuclear tools, such as validated nuclear data, chemical data and computer programs. It also provides a direct service to scientists in Member countries. Special arrangements cover the exchange of data and programs with Canada, the US and the IAEA.

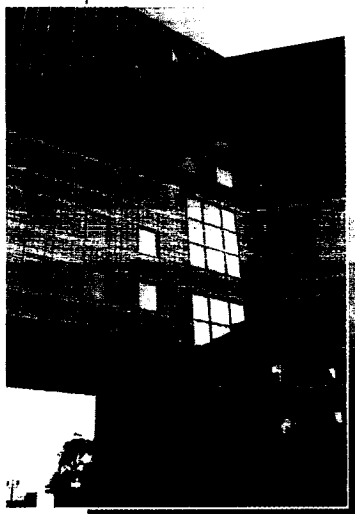
The Data Bank is supervised by the NEA Nuclear Science Committee, which has been set up to favour international co-operation in basic nuclear disciplines, to advance the scientific knowledge used in current nuclear systems and to develop next generation technologies.

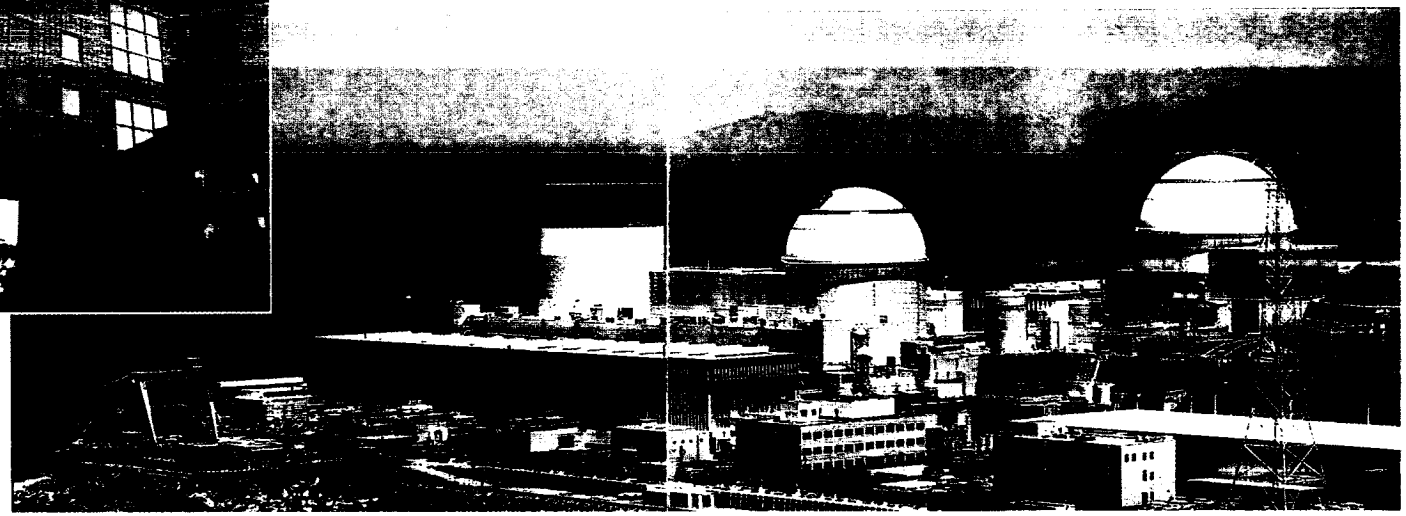
The NEA Data Bank provides:

- nuclear reaction data;
- tested computer programs;
- chemical thermodynamic data;
- benchmark data for computer program validation;
- seminars and training courses on the utilisation of major computer programs;

to scientists and engineers in nuclear energy, working in government research, industry and universities.

Services are cost-free.





Nuclear and chemical data

Nuclear data services

www.nea.fr/html/dbdata

For assistance, contact: data@nea.fr

Nuclear data, describing nuclear reactions or nuclear structure, are used in all nuclear applications. The Data Bank provides the following data:

Experimental nuclear reaction data

- measured data for neutron-, charged particle- and photon-induced reactions up to 1.5 GeV (EXFOR database).

Bibliography

- the nuclear structure reference database (NSR);
- the CINDA database gives references to measurements, evaluations and other literature on neutron-induced reaction data, with cross-references to the EXFOR database.

Evaluated data libraries

- the current standard version of the Joint Evaluated Fission and Fusion (JEFF) library;
- other complete evaluated libraries, such as ENDF/B, JENDL, BROND and CENDL.

Nuclear structure data

- complete nuclear structure evaluations (ENSDF);
- nuclear properties and selected integral data (NUDAT).

Chemical data services

www.nea.fr/html/dbtdb

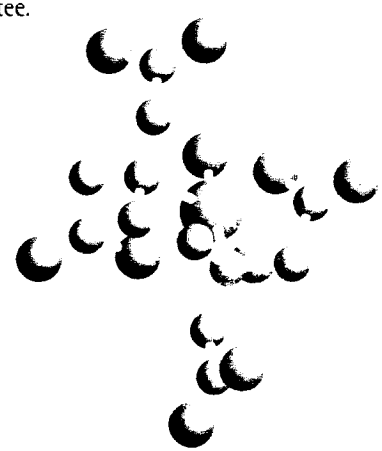
Send enquiries to: tdb@nea.fr

The thermochemical database (TDB) contains references, data and recommended thermodynamic values for a wide range of different chemical species. Data evaluations cover compounds of elements particularly important in the safety assessment of nuclear waste repositories, such as inorganic and simple organic compounds of Ni, Se, Zr, Tc, U, Np, Pu and Am.

Users may access:

- references, and published data for a large number of chemical species;
- recommended thermodynamic values for the elements mentioned above.

This work is carried out by the Data Bank in close co-operation with the NEA Radioactive Waste Management Committee.



Computer programs and benchmark data

Computer program services

www.nea.fr/ html/dbprog

For assistance, contact: programs@nea.fr

Computer programs and group cross-section data are collected, verified according to ANSI/ANS-recommended procedures and packaged ready for installation. The Data Bank library contains about 2000 documented programs and group cross-section data sets.

Major program categories

- spectrum calculations, generation of multigroup cross-sections, lattice and cell problems;
- static design studies;
- fuel management and reactor economics;
- kinetics, coupled neutronics, hydrodynamics, and thermodynamics;
- radiological safety and accident analysis;
- steady state and transient heat transfer;
- gamma heating and shield design;
- general mathematics and computing system routines;
- environmental impact of nuclear activities;
- material properties and behaviour under irradiation.

Lists of available programs are available through the Data Bank web pages, on CD-ROM and in regular electronic newsletters.

Validation data for computer programs

The Data Bank provides data from important integral experiments:

- *The International Handbook of Criticality Safety Benchmark Experiments* (ICSBEP) is published jointly by the NEA and the US DOE.
- International fuel performance experiments (IFPE) on instrumented fuel rods at high burnup.
- The SINBAD database of reactor shielding benchmark experiments, compiled by RSICC Oak Ridge and the Data Bank.
- The CSNI Code Validation Matrix (CCVM) is maintained for the NEA Committee on the Safety of Nuclear Installations, and contains experimental data for safety analysis of thermal-hydraulic reactor transients.