



21CR Project 605-00010 & 610-00010

ARTI Refrigerant Database

Objectives:

- (1) Develop a database for materials compatibility and lubricant research information on substitutes for chlorofluorocarbon (CFC) and hydrochlorofluorocarbon (HCFC) refrigerants for applied refrigeration cycles.
- (2) Assemble physical properties, materials compatibility, and related test data for these refrigerants and lubricants, along with comparative data for currently-used refrigerants.
- (3) Make the data readily accessible for rapid screening and identification of pertinent source documents based on user-defined search criteria.

Information/items expected to result from this project:

Information on alternative refrigerants, associated lubricants, and their use in air-conditioning and refrigeration. This primarily includes (1) citations and abstracts on relevant articles/documents and (2) data summaries on refrigerants, detailed refrigerant toxicity reviews, tabular compatibility summaries for plastics and elastomers.

How are the results likely to be applied:

AC&R manufacturers: design of equipment with alternative fluids; industry practitioners: for application information; code officials: for toxicity information; etc.

Research subcontractor:

James M. Calm, Engineering Consultant, Great Falls, VA (Principal Investigator: James M. Calm., P.E.)

Status: Maintenance of Refrigerant Database terminated in August 2001

On 31 August 2001, upon completion of all contractual obligations, ARTI development and administrative support for the Refrigerant Database ended. No provisions have been made for continued support of current or new database users. Licensed users are welcome to continue using the database after 31 August 2001. However, users were cautioned that data contained in the database are subject to revision.

Responsible 21CR Subcommittee: Working Fluids