

PACKAGE ID - 001216IBMPC00 DRFM

KWIC TITLE - Calculate Gas Phase Transport Properties of
Pure Species and Mixtures

AUTHORS - Paul, P.
Sandia National Labs, Livermore, CA (United States)

LIMITATION CODE -COPY **AUDIENCE CODE** - LIM

COMPLETION DATE - 10/20/1997 **PUBLICATION DATE** - 10/20/1997

DESCRIPTION - DRFM is a set of routines and data bases used to
calculate gas phase transport properties of pure species and
mixtures. The program(s) may stand alone or may be used as part of
a larger simulation.

PACKAGE CONTENTS - Media Directory; Software Abstract; Fact Sheets (8
pages); Media Includes Source Code, User's Guide, Sample Problem
Input and Output Data;

SOURCE CODE INCLUDED? - Yes

MEDIA QUANTITY - 1 3.5 Diskette

METHOD OF SOLUTION - DRFM does not solve a numerical problem, rather it
implements the mathematical relationships describing gas phase
transport properties in the low density limit as based on a set of
input data describing the individual species.

COMPUTER - IBM PC

OPERATING SYSTEMS - DOS, UNIX, WINDOWS

PROGRAMMING LANGUAGES - FORTRAN 77

SOFTWARE LIMITATIONS - Minimal

SOURCE CODE AVAILABLE (Y/N) - Y

UNIQUE FEATURES - DRFM implements recent advances in transport property
prediction.

HARDWARE REQS - PC running DEC POWERSTATION FORTRAN: minimal memory and
disk requirements.

TIME REQUIREMENTS - Run time depends on how many species are in a
mixture: for a 10 species mixture computed for 10 different
temperatures the program is final output 10 limited.

ABSTRACT STATUS - Released AS-IS 4/28/1998.

SUBJECT CLASS CODE - Z

E S T S C
ENERGY SCIENCE & TECHNOLOGY SOFTWARE CENTER
SOFTWARE ABSTRACT

PAGE 2

DATE 03/11/2002

PACKAGE ID - 001216IBMPC00 DRFM

KEYWORDS -

COMPUTER PROGRAM DOCUMENTATION
D CODES
TRANSPORT THEORY

EDB SUBJECT CATEGORIES -

990200

SPONSOR - DOE/DP

PACKAGE TYPE - AS - IS