



List of files in this archive

Top level directory:

Note: All files except the dll or shared library are plain text (space delimited, no tabs).

MATLAB MEX file, mexw64 (Windows) or mexa64 (Linux):

MarChemSpec.mexw64 (Windows), or MarChemSpec.mexa64 (Linux)

MARCHEMSPEC library file:

MarChemSpec.dll (Windows), or libMarChemSpec.so (Linux)

Documentation string:

MarChemSpec.m – File not used at run time as the MEX is used in preference. It contains a documentation string used by ‘help MarChemSpec’ in MATLAB.

Input/output logging:

MarChemSpec.log – records the input data received by the dll or shared library, and the results (before returning to the wrapper) if the debug option is on.

Other files (these should *not* be altered):

Pitzer.par, Pitzer.rcn, DO_NOT_DELETE.txt

Subdirectory .\docs

READ_ME_FIRST.txt – instructions concerning the download and how to get started.

List_of_files_MATLAB.pdf – this file.

MCS_MATLAB_manual.pdf – how to extract and run the model, and what the results mean.

MCS_alkalinity.pdf – how to adjust solutions for total alkalinity, total dissolved inorganic carbon, and total boron.

MCS_MATLAB_technical_note.txt – technical description of the MarChemSpec MEX file.

Subdirectory .\seawater

This contains a file Uncert.mst that should not be altered, and also a set of subdirectories (BC, CCA, AAC, NCA and _lnKeql) that contain variance information. The contents of these should also not be altered.

Subdirectory .\ASWbuffer

This contains a file Uncert.mst that should not be altered, and also a set of subdirectories (BC, CCA, AAC, NCA and _lnKeql) that contain variance information. The contents of these should also not be altered.

Subdirectory .\examples

iCalc_{1-7}.m – these are example scripts for the seven different types of calculation described in the manual. **Important:** you must edit these to include some directory paths before use.

iCalc_4_iFix_{1-11}.m – these example scripts demonstrate the eleven different cases in which either one or two values of the seawater state variables (alkalinity, dissolved inorganic carbon, pH and $p\text{CO}_2$ or $f\text{CO}_2$) are fixed by the user.

Notes

- None.