
pyiapws Documentation

Release 0.1.0

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CONTENTS:

1	Introduction	1
2	Release Notes	15
3	Autogenerated Documentation	17
4	Indices and tables	19
	Python Module Index	21
	Index	23

INTRODUCTION

1.1 Description

Python wrapper around the [Fortran iapws library](#). Follow the [installation instructions](#). for compiling and installing the library.

For now,the wrapper must be compiled on Linux, windows and MacOS platforms after installing the iapws library using the compiler that was used to compile your python interpreter.

The version of the python wrapper follows the versions (major and minor) of the iapws library. The patches will be independent.

A pdf version of the documentation can be found here [pycodata](#). The source code can be viewed on [GitHub](#).

1.2 How to install

```
pip install pyiapws
```

1.3 Dependencies

```
numpy>=1.20
```

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RELEASE NOTES

2.1 PyCodata 0.1.0 Release Note

2.1.1 Changes

- Implementation interface for IAPWS_G7_04 around the iapws constants.

2.1.2 Download

PyPI

2.1.3 Contributors

Milan Skocic

2.1.4 Commits

Full Changelog: <https://github.com/MilanSkocic/pyiapws/compare/...0.2.0>

AUTOGENERATED DOCUMENTATION

3.1 Documentation

3.1.1 pyiapws

IAPWS computations.

`pyiapws.iapws.get_kd(temperature: int | float | ndarray[Any, dtype[ScalarType]], gas: str, solvent: str) → float | ndarray[Any, dtype[ScalarType]]`

Compute the vapor-liquid distribution constant for the gas and solvent at temperature.

Parameters

temperature: int, float or array-like.

Temperature in °C.

gas: str

Desired gas.

solvent: str

Desired solvent: H2O or D2O.

Returns

kd: float or array-like

Henry constant in GPa-1.

`pyiapws.iapws.get_kh(temperature: int | float | ndarray[Any, dtype[ScalarType]], gas: str, solvent: str) → float | ndarray[Any, dtype[ScalarType]]`

Compute the Henry constant for the gas and solvent at temperature.

Parameters

temperature: int, float or array-like.

Temperature in °C.

gas: str

Desired gas.

solvent: str

Desired solvent: H2O or D2O.

Returns

kh: float or array-like

Henry constant in GPa-1.

INDICES AND TABLES

- `genindex`
- `modindex`
- `search`

PYTHON MODULE INDEX

p

`pyiapws.iapws`, [17](#)

INDEX

G

`get_kd()` (*in module `pyiapws.iapws`*), [17](#)

`get_kh()` (*in module `pyiapws.iapws`*), [17](#)

M

module

`pyiapws.iapws`, [17](#)

P

`pyiapws.iapws`

module, [17](#)