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# pyiapws Documentation

*Release 0.1.0*

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**Apr 21, 2023**



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## 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_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.

#### 3.1.2 \_iapws

C extension wrapping the Fortran iapws library.

```
pyiapws._iapws.get_kh()
```

get\_kh(T, gas, solvent) → float

Get the kH in GPa-1 value for gas in solvent for T. If not found returns NaN



## INDICES AND TABLES

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