

**NAME**

**saw** - get the standard atomic weight

**LIBRARY**

ciaaw - (-libciaaw, -lciaaw)

**SYNOPSIS**

```
function get_saw(s, abridged, uncertainty)result(res)
```

**DESCRIPTION**

This function returns the standard atomic weight.

Parameters:

**o character(len=\*)**, **intent(in)** :: *s*

Element symbol.

**o logical, intent(in), optional** :: *abridged*

Flag for returning the *abridged* standard atomic weight. Default to TRUE.

**o logical, intent(in), optional** :: *uncertainty*

Flag for returning the uncertainty instead of the value. Default to FALSE.

**RETURN VALUE**

**real(dp)** :: *res*

**NOTES**

The C API is defined by the following prototype:

```
double ciaaw_get_saw(char *s, int n, bool abridged, bool uncertainty)
```

The python wrapper is defined by the following prototype:

```
def get_saw(s: str, abridged: bool=True, uncertainty: bool=False)->float
```

**EXAMPLE**

Fortran

```
print '(A10, F10.5)', 'ASAW H    = ', get_saw( "H" )
```

C

```
printf("%s %10.5f0, "ASAW H    = ", ciaaw_get_saw("H", 1, true, false));
```

Python

```
print( "ASAW H    = ", pyciaaw.get_saw( "H" ) )
```

**SEE ALSO**

**ciaaw(3)**