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AntEqn calculates saturation pressure for a given temperature or saturation temperature for a given pressure using Antoine's equation. There is a list of species from which you can choose yours so you don't have to type A,B,C constants.

Press AntEq from lib menù to start the program.  
Your HP will display what follows:

Calculate:
Psat
Tsat

Choose to calculate Tsat or Psat.

```
RAD XYZ HEX C= 'X'          PROC
<HOME>
Enter T
```

```
:T:
ANTOI About
```

```
RAD XYZ HEX C= 'X'          PROC
<HOME>
Enter P
```

```
:P:
ANTOI About
```

Enter T or P then choose the unit from the following list:

```
Temperature unit
°C
°F
K
°R
```

```
CANCEL OK
```

```
Pressure unit
mmHg
atm
bar
psi
Pa
```

```
CANCEL OK
```

The next screen is:

```
List of Species
Enter Constants
```

```
CANCEL OK
```

If you choose to set manually the constants you can also choose the Antoine's equation form. This is very usefull because makes the program more flexible.

```
Equation Form:
Ln(P)=A-B/(T+C)
LOG(P)=A-B/(T+C)
```

```
CANCEL OK
```

```
RAD XYZ HEX C= 'X'          PROC
<HOME>
Enter A,B,C
```

```
:A:
:B:
:C:
ANTOI About
```

Please notice that since the output units depends on the form of the equation the result unit is unknown so you will get :

```

RAD XYZ HEX C= 'X'
{HOME}
5:
4:
3:
2:
1: 2.556_?
ANTOI About

```

The other option is to choose from a list of 22 species:

```

Choose the Specie
Acetone C3H6O
Acetylene C2H2
Air
Ammonia NH3
Benzene C6H6
Butane C4H10
CANCL OK

```

The available species are:

Acetone	Acetylene	Air	Ammonia	Benzene
Butane	Cyclobenzene	Ethane	Ethanol	Ethylbenzene
Etylene	Hexane	Isobutane	Isopentane	Methane
Methanol	Oxigen	Pentane	Propene	Phenol
Toluene	Water			

Once you selected the specie you will get Tsat ( °C ) or Psat (atm )

```

RAD XYZ HEX C= 'X'
{HOME}
5:
4:
3:
2:
1: 54.316_°C
ANTOI About

```

```

RAD XYZ HEX C= 'X'
{HOME}
5:
4:
3:
2:
1: 1.26_atm
ANTOI About

```

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## NOTICE

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Thank you for downloading this program.

Padova, 16/10/2002

For any suggestion or comment please contact me at [franzcol@inwind.it](mailto:franzcol@inwind.it) .