

## Saturated steam pressure values chart

(Temperature: Celsius / SVP: Pascals)

Temperature / SVP	Temperature / SVP	Temperature / SVP
1° – 657	14° – 1598	28° – 3779
2° – 706	15° – 1705	29° – 4005
3° – 758	16° – 1818	30° – 4242
4° – 813	17° – 1937	31° – 4492
5° – 872	18° – 2064	32° – 4754
6° – 935	19° – 2197	33° – 5029
7° – 1002	20° – 2338	34° – 5318
8° – 1073	21° – 2486	35° – 5621
9° – 1148	22° – 2643	36° – 5940
10° – 1228	23° – 2809	37° – 6273
11° – 1312	24° – 2983	38° – 6623
12° – 1402	25° – 3167	39° – 6990
13° – 1497	26° – 3361	40° – 7374
	27° – 3565	41° – 7776

## Saturated vapor pressure and temperature

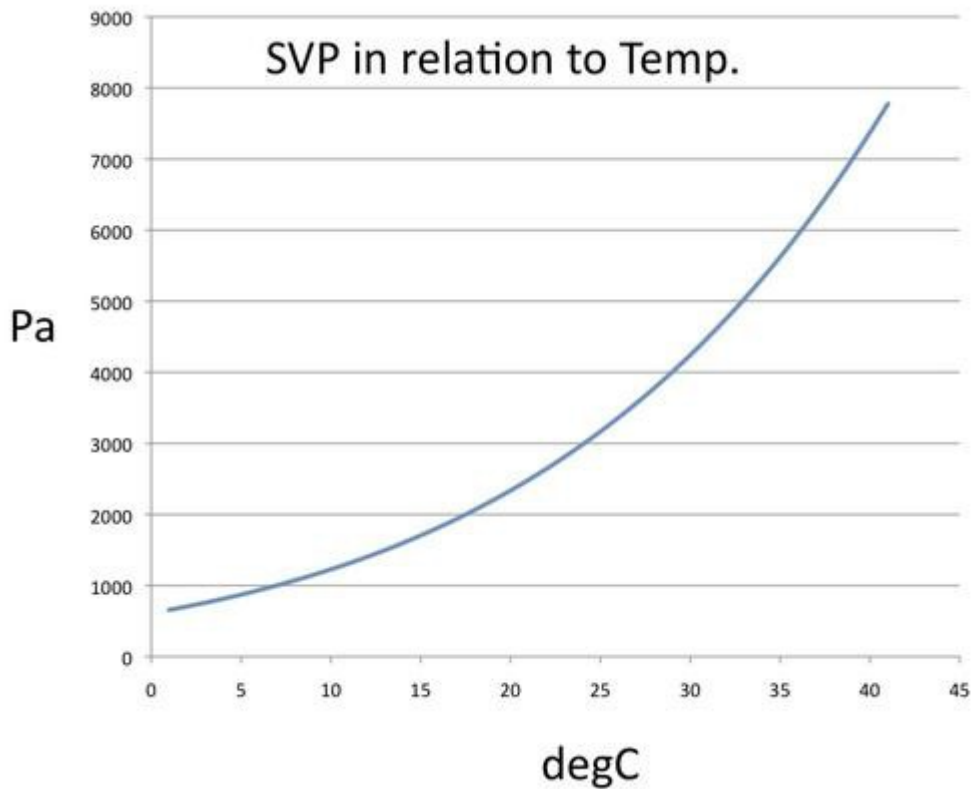
We use the following formula to **calculate the VPD**:

$$\text{VPD} = ((100 - \text{RH}) / 100) * \text{SVP}$$

Let's see an example: imagine that we have a grow room at 28°C with a relative humidity of 75%. If we take a look at the SVP chart, we will know that at 28 degrees Celsius corresponds to 3779 Pa. Let's apply the formula:

$$\text{VPD} = ((100 - 75) / 100) * 3779 \text{ so } \text{VPD} = 0.25 * 3779 = 945 \text{ Pascals} = 9.45 \text{ Hectopascals}$$

Considering that values of the table are given in Hectopascals, this gives us a result of **9.45 hPa**, a value located in the green area of the chart, perfect for our plants development. If we subtract the SVP value that we got, we will know the **saturation deficit**, that is, the amount of water that the environment still needs to form dew.



SVP (pascals) according to temperature (celsius)

**Low levels of VPD** combined with high relative humidity (light red zone) may cause [nutrient deficiencies](#), guttation phenomenon, different diseases or weak growth; while a high SPD value combined with low relative humidity (dark red zone) it could cause wilting, curled leaves, poor growth or crisp leaves.