

# So entsteht der Mangel an Luftfeuchtigkeit!

## Warum brauchen wir eine gewisse Luftfeuchtigkeit?

Luft hat das Verlangen, sich mit Feuchtigkeit vollzusaugen, bis sie gesättigt ist. Die Sättigung tritt je nach Temperatur bei unterschiedlichen Wassermengen pro m<sup>3</sup>-Luft ein. Bei 20°C ist die Sättigung bei 17.3 gr Wasser / m<sup>3</sup>! Der Bedarf an Wasser in der Luft ist also um so grösser, je tiefer der Gehalt an Wasser in der Luft ist. Der Mensch benötigt eine Luftfeuchtigkeit von 40% - 50% relativer Feuchtigkeit (rf). D. H. 9 gr/m<sup>3</sup> bei 52% rf. Sinkt die Luftfeuchtigkeit ab, z. B. auf 28% (4.8 gr/m<sup>3</sup>) müssen wir entsprechend Wasser hinzufügen. Um auf 52% rf zu erhöhen müssen wir also 4.2 gr Wasser pro m<sup>3</sup> ergänzen.

Temperatur °C	Absolute Luftfeuchtigkeit in Gramm / m <sup>3</sup>										Relative Feuchtigkeit in %										
	100	96	92	88	84	80	76	72	68	64	60	56	52	48	44	40	36	32	28	24	20
0	4.8	4.7	4.5	4.3	4.1	3.9	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.3	2.1	1.9	1.7	1.6	1.4	1.2	1.0
1	5.2	5.0	4.8	4.6	4.4	4.2	3.9	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.3	2.1	1.9	1.7	1.5	1.2	1.0
2	5.6	5.3	5.1	4.9	4.7	4.4	4.2	4.0	3.8	3.6	3.3	3.1	2.9	2.7	2.4	2.2	2.0	1.8	1.6	1.3	1.1
3	6.0	5.7	5.5	5.2	5.0	4.8	4.5	4.3	4.0	3.8	3.6	3.3	3.1	2.9	2.6	2.4	2.1	1.9	1.7	1.4	1.2
4	6.4	6.1	5.9	5.6	5.3	5.1	4.8	4.6	4.3	4.1	3.8	3.6	3.3	3.1	2.8	2.5	2.3	2.0	1.8	1.5	1.3
5	6.8	6.5	6.3	6.0	5.7	5.4	5.2	4.9	4.6	4.4	4.1	3.8	3.5	3.3	3.0	2.7	2.4	2.2	1.9	1.6	1.4
6	7.3	7.0	6.7	6.4	6.1	5.8	5.5	5.2	4.9	4.6	4.4	4.1	3.8	3.5	3.2	2.9	2.6	2.3	2.0	1.7	1.5
7	7.7	7.4	7.1	6.8	6.5	6.2	5.9	5.6	5.3	5.0	4.6	4.3	4.0	3.7	3.4	3.1	2.8	2.5	2.2	1.9	1.5
8	8.3	7.9	7.6	7.3	6.9	6.6	6.3	6.0	5.6	5.3	5.0	4.6	4.3	4.0	3.6	3.3	3.0	2.6	2.3	2.0	1.7
9	8.8	8.5	8.1	7.8	7.4	7.1	6.7	6.3	6.0	5.6	5.3	4.9	4.6	4.2	3.9	3.5	3.2	2.8	2.5	2.1	1.8
10	9.4	9.0	8.6	8.3	7.9	7.5	7.1	6.8	6.4	6.0	5.6	5.3	4.9	4.5	4.1	3.8	3.4	3.0	2.6	2.3	1.9
11	10.0	9.6	9.2	8.8	8.4	8.0	7.6	7.2	6.8	6.4	6.0	5.6	5.2	4.8	4.4	4.0	3.6	3.2	2.8	2.4	2.0
12	10.7	10.2	9.8	9.4	9.0	8.5	8.1	7.7	7.2	6.8	6.4	6.0	5.5	5.1	4.7	4.3	3.8	3.4	3.0	2.6	2.1
13	11.3	10.9	10.4	10.0	9.5	9.1	8.6	8.2	7.7	7.3	6.8	6.4	5.9	5.4	5.0	4.5	4.1	3.6	3.2	2.7	2.3
14	12.1	11.6	11.1	10.6	10.1	9.7	9.2	8.7	8.2	7.7	7.2	6.8	6.3	5.8	5.3	4.8	4.3	3.9	3.4	2.9	2.4
15	12.8	12.3	11.8	11.3	10.8	10.3	9.7	9.2	8.7	8.2	7.7	7.2	6.7	6.2	5.6	5.1	4.6	4.1	3.6	3.1	2.6
16	13.6	13.1	12.5	12.0	11.4	10.9	10.4	9.8	9.3	8.7	8.2	7.6	7.1	6.5	6.0	5.4	4.9	4.4	3.8	3.3	2.7
17	14.5	13.9	13.3	12.7	12.2	11.6	11.0	10.4	9.8	9.3	8.7	8.1	7.5	6.9	6.4	5.8	5.2	4.6	4.1	3.5	2.9
18	15.4	14.7	14.1	13.5	12.9	12.3	11.7	11.1	10.4	9.8	9.2	8.6	8.0	7.4	6.8	6.1	5.5	4.9	4.3	3.7	3.1
19	16.3	15.6	15.0	14.3	13.7	13.0	12.4	11.7	11.1	10.4	9.8	9.1	8.5	7.8	7.2	6.5	5.9	5.2	4.6	3.9	3.3
20	17.3	16.6	15.9	15.2	14.5	13.8	13.1	12.4	11.8	11.1	10.4	9.7	9.0	8.3	7.6	6.9	6.2	5.5	4.8	4.1	3.5
21	18.3	17.6	16.9	16.1	15.4	14.7	13.9	13.2	12.5	11.7	11.0	10.3	9.5	8.8	8.1	7.3	6.6	5.9	5.1	4.4	3.7
22	19.4	18.6	17.9	17.1	16.3	15.5	14.8	14.0	13.2	12.4	11.6	10.9	10.1	9.3	8.5	7.8	7.0	6.2	5.4	4.7	3.9
23	20.6	19.7	18.9	18.1	17.3	16.5	15.6	14.8	14.0	13.2	12.3	11.5	10.7	9.9	9.0	8.2	7.4	6.6	5.8	4.9	4.1
24	21.8	20.9	20.0	19.2	18.3	17.4	16.5	15.7	14.8	13.9	13.1	12.2	11.3	10.4	9.6	8.7	7.8	7.0	6.1	5.2	4.4
25	23.0	22.1	21.2	20.3	19.3	18.4	17.5	16.6	15.7	14.7	13.8	12.9	12.0	11.1	10.1	9.2	8.3	7.4	6.4	5.5	4.6
26	24.4	23.4	22.4	21.4	20.5	19.5	18.5	17.5	16.6	15.6	14.6	13.6	12.7	11.7	10.7	9.7	8.8	7.8	6.8	5.8	4.9
27	25.8	24.7	23.7	22.7	21.6	20.6	19.6	18.5	17.5	16.5	15.5	14.4	13.4	12.4	11.3	10.3	9.3	8.2	7.2	6.2	5.2
28	27.2	26.1	25.0	23.9	22.9	21.8	20.7	19.6	18.5	17.4	16.3	15.2	14.2	13.1	12.0	10.9	9.8	8.7	7.6	6.5	5.4
29	28.7	27.6	26.4	25.3	24.1	23.0	21.8	20.7	19.5	18.4	17.2	16.1	14.9	13.8	12.6	11.5	10.3	9.2	8.0	6.9	5.7
30	30.3	29.1	27.9	26.7	25.5	24.3	23.1	21.8	20.6	19.4	18.2	17.0	15.8	14.6	13.4	12.1	10.9	9.7	8.5	7.3	6.1
31	32.0	30.7	29.5	28.2	26.9	25.6	24.3	23.1	21.8	20.5	18.7	17.9	16.7	15.4	14.1	12.8	11.5	10.2	9.0	7.7	6.4
32	33.8	32.4	31.1	29.7	28.4	27.0	25.7	24.3	23.0	21.6	20.3	18.9	17.6	16.2	14.9	13.5	12.2	10.8	9.5	8.1	6.8
33	35.6	34.2	32.8	31.4	29.9	28.5	27.1	25.7	24.2	22.8	21.4	20.0	18.5	17.1	15.7	14.3	12.8	11.4	10.0	8.6	7.1
34	37.6	36.0	34.5	33.0	31.5	30.0	28.5	27.0	25.5	24.0	22.5	21.0	19.5	18.0	16.5	15.0	13.5	12.0	10.5	9.0	7.5
35	39.6	38.0	36.4	34.8	33.2	31.7	30.1	28.5	26.9	25.3	23.7	22.2	20.6	19.0	17.4	15.8	14.2	12.7	11.1	9.5	7.9
36	41.7	40.0	38.3	36.7	35.0	33.3	31.7	30.0	28.3	26.7	25.0	23.3	21.7	20.0	18.3	16.7	15.0	13.3	11.7	10.0	8.3
37	43.9	42.1	40.4	38.6	36.9	35.1	33.3	31.6	29.8	28.1	26.3	24.6	22.8	21.1	19.3	17.5	15.8	14.0	12.3	10.5	8.8
38	46.2	44.3	42.5	40.6	38.8	36.9	35.1	33.2	31.4	29.5	27.7	25.9	24.0	22.2	20.3	18.5	16.6	14.8	12.9	11.1	9.2
39	48.6	46.6	44.7	42.7	40.8	38.9	36.9	35.0	33.0	31.1	29.1	27.2	25.3	23.3	21.4	19.4	17.5	15.5	13.2	11.7	9.7