

Mass Standards Handbook — Conversion Table

Table 11 - Conversion Table (All underlined figures are exact)

UNITS OF MASS NOT GREATER THAN POUNDS AND KILOGRAMS							
UNITS	GRAINS	APOTHECARIES SCRUPLES	PENNYWEIGHTS	AVOIRDUPOIS DRAMS	APOTHECARIES DRAMS	AVOIRDUPOIS OUNCES	
1 grain =	<u>1</u>	<u>0.05</u>	0.041 666 67	0.036 571 43	0.016 666 67	0.002 285 714	
1 apoth. scruple =	<u>20</u>	<u>1</u>	0.833 333 3	0.731 428 6	0.333 333 3	0.045 714 29	
1 pennyweight =	<u>24</u>	<u>1.2</u>	<u>1</u>	0.877 714 3	<u>0.4</u>	0.054 857 14	
1 avdp. dram =	<u>27.343 75</u>	<u>1.367 187 5</u>	1.139 323	<u>1</u>	0.455 729 2	<u>0.062 5</u>	
1 apoth. dram =	<u>60</u>	<u>3</u>	<u>2.5</u>	2.194 286	<u>1</u>	0.137 142 9	
1 avdp. ounce =	<u>437.5</u>	<u>21.875</u>	18.229 17	<u>16</u>	7.291 667	<u>1</u>	
1 apoth. or troy ounce =	<u>480</u>	<u>24</u>	<u>20</u>	17.554 29	<u>8</u>	1.097 143	
1 apoth. or troy pound =	<u>5 760</u>	<u>288</u>	<u>240</u>	210.651 4	<u>96</u>	13.165 71	
1 avdp. pound =	<u>7 000</u>	<u>350</u>	291.666 7	<u>256</u>	116.666 7	<u>16</u>	
1 milligram =	0.015 432 36	0.000 771 617 9	0.000 643 014 9	0.000 564 383 4	0.000 257 206 0	0.000 035 273 96	
1 gram =	15.432 36	0.771 617 9	0.643 014 9	0.564 383 4	0.257 206 0	0.035 273 96	
1 kilogram =	15432.36	771.617 9	643.014 9	564.383 4	257.206 0	35.273 96	
UNITS	APOTHECARIES OR TROY OUNCES	APOTHECARIES OR TROY POUNDS	AVOIRDUPOIS POUNDS	MILLIGRAMS	GRAMS	KILOGRAMS	
1 grain =	0.002 083 333	0.000 173 611 1	0.000 142 857 1	<u>64.798 91</u>	<u>0.064 798 91</u>	<u>0.000 064 798 91</u>	
1 apoth. scruple =	0.041 666 67	0.003 472 222	0.002 857 143	<u>1295.978 2</u>	<u>1.295 978 2</u>	<u>0.001 295 978 2</u>	
1 pennyweight =	<u>0.05</u>	0.004 166 667	0.003 428 571	<u>1555.173 84</u>	<u>1.555 173 84</u>	<u>0.001 555 173 84</u>	
1 avdp. dram =	0.056 966 146	0.004 747 179	0.003 906 25	<u>1771.845 195 312 5</u>	<u>1.771 845 195 312 5</u>	<u>0.001 771 845 195 312 5</u>	
1 apoth. dram =	<u>0.125</u>	0.010 416 67	0.008 571 429	<u>3887.934 6</u>	<u>3.887 934 6</u>	<u>0.003 887 934 6</u>	
1 avdp. ounce =	0.911 458 3	0.075 954 86	<u>0.062 5</u>	<u>28 349.523 125</u>	<u>28.349 523 125</u>	<u>0.028 349 523 125</u>	
1 apoth. or troy ounce =	<u>1</u>	0.083 333 333	0.068 571 43	<u>31 103.476 8</u>	<u>31.103 476 8</u>	<u>0.031 103 476 8</u>	
1 apoth. or troy pound =	<u>12</u>	<u>1</u>	0.822 857 1	<u>373 241.721 6</u>	<u>373.241 721 6</u>	<u>0.373 241 721 6</u>	
1 avdp. pound =	14.583 33	1.215 278	<u>1</u>	<u>453 592.37</u>	<u>453.592 37</u>	<u>0.453 592 37</u>	
1 milligram =	0.000 032 150 75	0.000 002 679 229	0.000 002 204 623	<u>1</u>	<u>0.001</u>	<u>0.000 001</u>	
1 gram =	0.032 150 75	0.002 679 229	0.002 204 623	<u>1 000</u>	<u>1</u>	<u>0.001</u>	
1 kilogram =	32.150 75	2.679 229	2.204 623	<u>1 000 000</u>	<u>1 000</u>	<u>1</u>	
UNITS OF MASS NOT LESS THAN AVOIRDUPOIS OUNCES							
UNITS	AVOIRDUPOIS OUNCES	AVOIRDUPOIS POUNDS	SHORT HUNDRED-WEIGHTS	SHORT TONS	LONG TONS	KILOGRAMS	METRIC TONS
1 avdp. ounce =	<u>1</u>	<u>0.0625</u>	<u>0.000 625</u>	<u>0.000 031 25</u>	0.000 027 901 79	<u>0.028 349 523 125</u>	<u>0.000 028 349 523 125</u>
1 avdp. pound =	<u>16</u>	<u>1</u>	<u>0.01</u>	<u>0.000 5</u>	0.000 446 428 6	<u>0.453 592 37</u>	<u>0.000 453 592 37</u>
1 short hundredweight =	<u>1600</u>	<u>100</u>	<u>1</u>	<u>0.05</u>	0.044 642 86	<u>45.359 237</u>	<u>0.045 359 237</u>
1 short ton =	<u>32 000</u>	<u>2 000</u>	<u>20</u>	<u>1</u>	0.892 857 1	<u>907.184 74</u>	<u>0.907 184 74</u>
1 long ton =	<u>35 840</u>	<u>2 240</u>	<u>22.4</u>	<u>1.12</u>	<u>1</u>	<u>1016.046 908 8</u>	<u>1.016 046 908 8</u>
1 kilogram =	35.273 96	2.204 623	0.022 046 23	0.001 102 311	0.000 984 206 5	<u>1</u>	<u>0.001</u>
1 metric ton =	35 273.96	2204.623	22.046 23	1.102 311	0.984 206 5	<u>1 000</u>	<u>1</u>