

# MINERAL MAKEUP OF SEAWATER

In order of most to least:

ELEMENT	MOLECULAR WEIGHT	PPM IN SEAWATER	MOLAR CONCENTRATION
Chloride	35.4	18980	0.536158
Sodium	23	10561	0.459174
Magnesium	24.3	1272	0.052346
Sulfur	32	884	0.027625
Calcium	40	400	0.01
Potassium	39.1	380	0.009719
Bromine	79.9	65	0.000814
Carbon(inorganic)	12	28	0.002333
Strontium	87.6	13	0.000148
Boron	10.8	4.6	0.000426
Silicon	28.1	4	0.000142
Carbon (organic)	12	3	0.00025
Aluminum	27	1.9	0.00007
Fluorine	19	1.4	0.000074
N as nitrate	14	0.7	0.00005
Nitrogen (organic)	14	0.2	0.000014
Rubidium	85	0.2	0.0000024
Lithium	6.9	0.1	0.000015
P as Phosphate	31	0.1	0.0000032
Copper	63.5	0.09	0.0000014
Barium	137	0.05	0.00000037
Iodine	126.9	0.05	0.00000039
N as nitrite	14	0.05	0.0000036
N as ammonia	14	0.05	0.0000036

<b>Arsenic</b>	<b>74.9</b>	<b>0.024</b>	<b>0.00000032</b>
<b>Iron</b>	<b>55.8</b>	<b>0.02</b>	<b>0.00000036</b>
<b>P as organic</b>	<b>31</b>	<b>0.016</b>	<b>0.00000052</b>
<b>Zinc</b>	<b>65.4</b>	<b>0.014</b>	<b>0.00000021</b>
<b>Manganese</b>	<b>54.9</b>	<b>0.01</b>	<b>0.00000018</b>
<b>Lead</b>	<b>207.2</b>	<b>0.005</b>	<b>0.000000024</b>
<b>Selenium</b>	<b>79</b>	<b>0.004</b>	<b>0.000000051</b>
<b>Tin</b>	<b>118.7</b>	<b>0.003</b>	<b>0.000000025</b>
<b>Cesium</b>	<b>132.9</b>	<b>0.002</b>	<b>0.000000015</b>
<b>Molybdenum</b>	<b>95.9</b>	<b>0.002</b>	<b>0.000000021</b>
<b>Uranium</b>	<b>238</b>	<b>0.0016</b>	<b>0.0000000067</b>
<b>Gallium</b>	<b>69.7</b>	<b>0.0005</b>	<b>0.0000000072</b>
<b>Nickel</b>	<b>58.7</b>	<b>0.0005</b>	<b>0.0000000085</b>
<b>Thorium</b>	<b>232</b>	<b>0.0005</b>	<b>0.0000000022</b>
<b>Cerium</b>	<b>140</b>	<b>0.0004</b>	<b>0.0000000029</b>
<b>Vanadium</b>	<b>50.9</b>	<b>0.0003</b>	<b>0.0000000059</b>
<b>Lanthanum</b>	<b>139.9</b>	<b>0.0003</b>	<b>0.0000000022</b>
<b>Yttrium</b>	<b>88.9</b>	<b>0.0003</b>	<b>0.0000000034</b>
<b>Mercury</b>	<b>200.6</b>	<b>0.0003</b>	<b>0.0000000015</b>
<b>Silver</b>	<b>107.9</b>	<b>0.0003</b>	<b>0.0000000028</b>
<b>Bismuth</b>	<b>209</b>	<b>0.0002</b>	<b>0.00000000096</b>
<b>Cobalt</b>	<b>58.9</b>	<b>0.0001</b>	<b>0.0000000017</b>
<b>Gold</b>	<b>197</b>	<b>0.000008</b>	<b>0.00000000004</b>