

Ausfall- pH Bereich bestimmter Metalloxide und -hydroxide

| Element | Metal oxide or hydroxide | Precipitation pH | Highest precip | Lowest Precip |
|------------------|--------------------------|------------------|----------------|---------------|
| Niobium | Nb 5+ | 1 to 10 | 10 | 1 |
| Tantalum | Ta 5+ | 1 to 10 | 10 | 1 |
| Hafnium | Hf 4+ | 6 to 7 | 7 | 6 |
| Indium | In 3+ | 6 to 13 | 13 | 6 |
| Iridium | Ir 4+ | 6 to 8 | 8 | 6 |
| Rhenium | Re 3+ | 6 and up 1N | 14 | 6 |
| Thorium | Th 4+ | 6 and up 1N | 14 | 6 |
| Zirconium | Zr 4+ | 6 to 7 | 7 | 6 |
| Aluminum | Al 3+ | 7 to 8 | 8 | 7 |
| Antimony | Sb 3+ | 7 to 8 | 8 | 7 |
| Antimony | Sb 5+ | 7 to 8 | 8 | 7 |
| Beryllium | Be 2+ | 7 to 8=7F | 8 | 7 |
| Bismuth | Bi 3+ | 7 and up 1N | 14 | 7 |
| Cadmium | Cd 2+ | 7 and up 1N | 14 | 7 |
| Chromium | Cr 3+ | 7 and up 1N | 14 | 7 |
| Copper | Cu 2+ | 7 and up 1N | 14 | 7 |
| Gallium | Ga 3+ | 7 to 8 | 8 | 7 |
| Gold | Au 3+ | 7 to 8 | 8 | 7 |
| Iron | Fe 2+ | 7 and up 1N | 14 | 7 |
| Lead | Pb 2+ | 7 to 8 | 8 | 7 |
| Manganese | Mn 4+ | 7 and up 1N | 14 | 7 |
| Osmium | Os 4+ | 7 to 8 | 8 | 7 |
| Paladium | Pd 2+ | 7 to 8 | 8 | 7 |
| Paladium | Pd 4+ | 7 to 8 | 8 | 7 |
| Platinum | Pt 2+ | 7 to 8 | 8 | 7 |
| Rhodium | Rh 3+ | 7 to 8 | 8 | 7 |
| Ruthenium | Ru 3+ | 7 and up 1N | 14 | 7 |
| Tin | Sn 2+ | 7 to 8 | 8 | 7 |
| Tin | Sn 4+ | 7 to 8 | 8 | 7 |
| Vanadium | V 4+ | 7 to 8 | 8 | 7 |
| Vanadium | V 5+ | 7 to 8 | 8 | 7 |
| Zinc | Zn 2+ | 7 to 8 | 8 | 7 |
| Cobalt | Co 2+ | 8 and up 1N | 14 | 8 |
| Manganese | Mn 2+ | 8 and up 1N | 14 | 8 |
| Mercury | Hg 1+ | 8 and up 1N | 14 | 8 |
| Mercury | Hg 2+ | 8 and up 1N | 14 | 8 |
| Nickel | Ni 2+ | 8 and up 1N | 14 | 8 |
| Scandium | Sc 3+ | 8 and up 1N | 14 | 8 |

| | | | | |
|------------------|-------|----------------|----|---|
| Titanium | Ti 3+ | 8 and up 1N | 14 | 8 |
| Titanium | Ti 4+ | 8 and up 1N | 14 | 8 |
| Copper | Cu 1+ | 9 and up 1N | 14 | 9 |
| Magnesium | Mg 2+ | 9 and up 1N | 14 | 9 |
| Silver | Ag 1+ | pH 9 and up 1N | 14 | 9 |
| Thallium | Tl 3+ | 9 and up 1N | 14 | 9 |

Der pH natürlicher Ausgangsstoffe und ihre Verhältnisse zu den hydroxidischen Ausfallprodukten

| pH | Precipitation of hydroxides | Natural media | pH |
|----|-----------------------------|----------------------|----|
| 11 | Magnesium | | 11 |
| 10 | Magnesium | Alkali soils | 10 |
| 9 | Bivalent Manganese | Seawater | 9 |
| 8 | Bivalent Manganese | Seawater | 8 |
| 7 | Bivalent Iron | River water | 7 |
| 6 | Zinc Copper | Rain water | 6 |
| 5 | Aluminum | | 5 |
| 4 | | Peat water | 4 |
| 3 | Triavalent iron | Mine waters | 3 |
| 2 | Triavalent iron | Acid thermal springs | 2 |
| 1 | | Acid thermal springs | 1 |