| Ions That Form Soluble | Exceptions |
|---|--|
| Compounds | |
| ammonium and Group 1 ions | |
| (NH ₄ ⁺ , Li ⁺ , Na ⁺ , etc.) | |
| chlorate, perchlorate and nitrate | |
| (ClO ₃ , ClO ₄ , NO ₃ ,) | |
| hydrogen carbonate and | |
| acetate | |
| $(HCO_3$, CH_3COO or $C_2H_3O_2$) | |
| halides | when combined with |
| (Cl ⁻ , Br ⁻ , l ⁻) | Ag ⁺ , Pb ²⁺ and Hg ₂ ²⁺ |
| sulfates | when combined with |
| (SO ₄ ²⁻) | Ag ⁺ , Ca ²⁺ , Sr ²⁺ , Ba ²⁺ , |
| | and Pb ²⁺ |

| Ions That Form | Exceptions |
|-----------------------------------|--|
| Insoluble Compounds | |
| carbonate | when combined with |
| (CO ₃ ² -) | ammonium and Group 1 ions |
| chromate | when combined with |
| (CrO ₄ ²⁻) | ammonium, Group 1 ions, |
| | Ca ²⁺ and Mg ²⁺ |
| phosphate | when combined with |
| (PO ₄ ³⁻) | ammonium and Group 1 ions |
| sulfide | when combined with |
| (S ²⁻) | ammonium and Group 1 ions |
| hydroxide | when combined with |
| (OH ⁻) | ammonium, Group 1 ions, |
| | Ca ²⁺ , Ba ²⁺ , and Sr ²⁺ |