

GRUPA III : Fe²⁺, Fe³⁺, Mn²⁺, Ni²⁺, Co²⁺

| | Mn ²⁺ | Fe ²⁺ | Fe ³⁺ | Ni ²⁺ | Co ²⁺ |
|---|---------------------|--------------------------------------|-----------------------------------|---|--|
| reactiv de grupa $(\text{NH}_4)_2\text{S}$ $(2\text{NH}_4^+ + \text{S}^{2-})$ | MnS | FeS | Fe ₂ S ₃ | NiS | CoS |
| | Sulfura de Mn | | Sulfura ferica | | |
| | Pp roz cul carni | pp negru | Pp negru | pp negru | pp negru |
| | Sol in acid acetic | sol in acizi | Sol in acizi | | sol in acid nitric |
| KOH, NaOH | Mn(OH) ₂ | Fe(OH) ₂ | Fe(OH) ₃ | Ni(OH) ₂ | |
| | Hidroxid de Mn | Hidroxis feros | | Hidroxid nichelos | sare bazica de C |
| | Pp alb gelatinos | Pp verzui | Pp rosu-brun | Pp verde | pp albastru |
| | aer oxid → brun | | Sol in acizi | Insol in exces de reactiv, sol in acizi | |
| Na ₂ CO ₃ , K ₂ CO ₃ | MnCO ₃ | | | NiCO ₃ | CoCO ₃ |
| | Carbonat de Mn | | | Carbonat de Ni | carbonat de |
| | Pp alb | | | Pp verzui-gelatinos | pp roz |
| | Sol in acizi | | | NiOH ⁺ | Cl-Co-OH |
| NH ₄ OH | | Fe(OH) ₂ | Fe(OH) ₃ | Sare bazica de | sare bazica de |
| | | hidroxidul feros | | Pp verde | |
| | | pp incomplet | | | |
| | | | insol in exc de r | | |
| (NH ₄ ⁺ + SCN ⁻) NH ₄ SCN | | | K[Fe(SCN) ₆] | | K ₂ [Co(SCN) ₄] ²⁻ |
| | | | | | Complex tetratiocianatoco baltat(II) |
| | | | | | albastru |
| | | | | | in prez acetonei |
| Py + KSCN | | | | Ni(Py) ₄ (SCN) ₂ | Co(Py) ₄ (SCN) ₂ |
| | | | | | |
| | | | | Pp albastru-cer | pp roz crist |
| | | | | | |
| CH ₃ COONa acetat de sodiu | | | r spec complex brun-roscat | | |
| o-fenantrolina | | r spec complex chelat rosu intens | complex colorat in albastru | | |
| dimetilgioxina | | r spec complex col rosu-carmin | | | r spec complex pp roz |
| α-α dipiridil | | r spec complex col in rosu | | | |
| cupferona | | | r spec complex colorat in rosu | | |
| acid S-salicilic | | | r spec | | |
| sulfo-cianura | | | r spec | | |