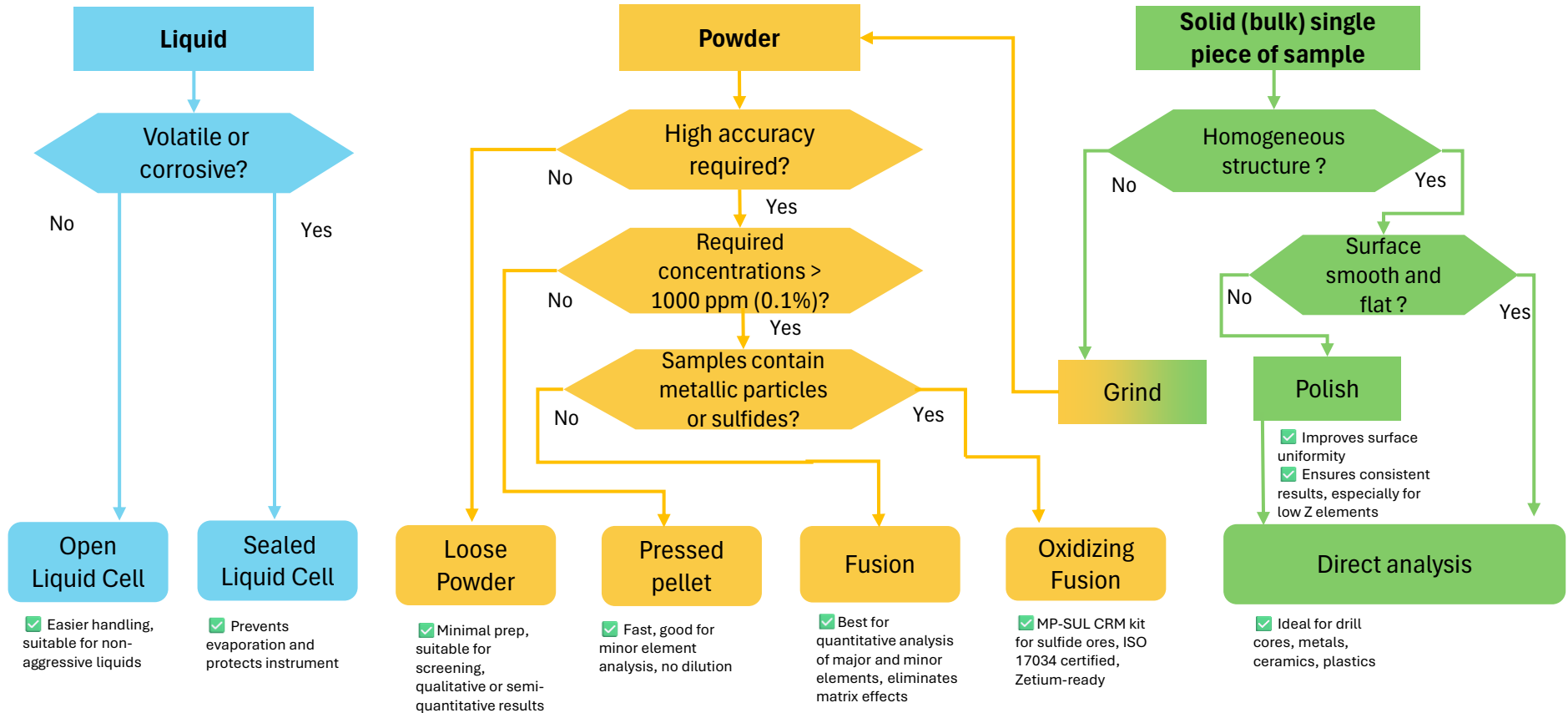


# XRF Sample Preparation Decision Tree

Quick Reference Guide: Elemental analysis of Critical Minerals

What kind of material are you analyzing ?



## Tips and Pitfalls

- 💡 Lightly compressing a loose powder (using a weight) improves the analysis
- 🗑️ Pressed pellets require a binder like wax or cellulose — quick but less precise than fused beads.
- 🔥 Fused beads need flux, Pt ware and high temperature heat—ideal for accurate analysis of oxides, silicates, and complex matrices.
- 🧴 Liquid samples must be free of bubbles and particles to avoid scattering and ensure reliable XRF readings.
- 🔍 Proper surface prep is essential for reproducibility and trace element accuracy in solid sample analysis.