

This table is comprehensive and lists more properties than you needed to list.

| Property | Covalent Molecular Substance | Ionic Compound | Metal |
|---------------------------|-------------------------------------|----------------------------|-------------------------------------|
| Hardness | Soft, easily breakable | Hard, brittle | Malleable |
| Melting Point | Low, often below room temperature | High (700 - 3500 °C) | Usually above room temp. |
| Boiling Point | Low, can be below room temp. | High (above 800 °C) | Above room temp. |
| Elec. Conductivity | Low as solid or liquid | Low (solid); high (liquid) | High as solid or liquid |
| Water Solubility | Variable, depending on structure | Often soluble | Very low unless reactive with water |