

Curiosity: What a Chromatogram Can and Cannot Tell You

Curiosity Reading | CheAI Research Inc.

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Connection: art and forensics

Reading time: 4 minutes

Chromatography can spread a mixed ink into separate colored bands because components travel differently through paper and solvent. A matching pattern can support a comparison, but one result does not prove identity: paper, solvent, amount, and reference samples matter. Chemists strengthen a claim by controlling conditions and using more than one property.

Think like a chemist

1. What evidence suggests an ink is a mixture?
2. Why is a reference sample useful?
3. What safety reason favors water and washable markers in class?

Word	Student-friendly meaning	Packet
chromatography	separation by different movement	12, 15
solution	uniform mixture	4, 7
reference	known comparison sample	15, 18