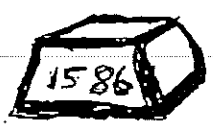


TLC Visualizing Solutions

<u>Reagent</u>	<u>Recipe</u>	<u>Visualizes</u>
Anisaldehyde 200 mL EtOH 7.4 mL H ₂ SO ₄ 2.2 mL AcOH 5.5 mL Anisaldehyde	9.2 mL anisaldehyde 3.75 mL AcOH 338 mL 95% EtOH 12.5 mL conc. H ₂ SO ₄	Alcohols Acids Esters Ketones Aldehydes
Copper Sulfate	3% (w/v) CuSO ₄ in 15% aq. H ₃ PO ₄	
Cerium Sulfate	8g Ce(SO ₄) ₂ ·2H ₂ SO ₄ 100 mL 15% aq. H ₂ SO ₄	
2,4-Dinitrophenylhydrazine	12g 2,4-DNP in 60 mL conc. H ₂ SO ₄ added to 80 mL H ₂ O and 200 mL 95% EtOH	Aldehydes Ketones
Potassium Permanganate	3g KMnO ₄ 20g K ₂ CO ₃ 5 mL 5% aq. NaOH 300 mL H ₂ O	
Ninhydrin	0.3% (w/v) in 97% n-BuOH/3% AcOH	Amino Acids
Phosphomolybdic Acid (PMA)	230g PMA in 1 gal. 95% EtOH	
Vanillin	60g vanillin 1000 mL 95% EtOH 10 mL conc. H ₂ SO ₄	
Bromocresol green	0.3% BCG in 4:1 CH ₃ OH:H ₂ O plus 8 drops of 30% aq NaOH per 100 ml of stain sol'n	



AMMONIUM Molybdate

12g (NH₄)₂Mo in 250 mL 10% H₂SO₄