

Functional group	Test	Description of positive test
Alkane	Flame test	Clear flame
Aromatic	Flame test	Sooty flame
Alkene	Bromine	Bromine color disappears
Alkene	Permanganate	Purple color disappears, brown ppt appears
Aromatic	Bromine + AlCl ₃	Bromine color disappears only when AlCl ₃ added
3 Alcohol	Lucas	Cloudy solution appears rapidly
1 or 2 Alcohol	Chromic acid	Chromic acid changes from yellow to green
Methyl Alcohol	Iodoform	Precipitate of CHI ₃ forms
Alcohol	Solubility	
Phenol	Iodine	
Phenol	Ferric chloride	
Phenol	Solubility & pH	
Aldehyde	Tollens	Silver mirror forms on test tube
Aldehyde & Ketone	2,4-DNP	Orange or yellow ppt forms
Aldehyde	Fehlings solution	Blue color changes to copper color (the Cu version of Tollens)
Carbohydrate (reducing sugar)	Fehlings solution	Blue color changes to copper color
Amine	Solubility & pH	
Methyl ketone	iodoform	Precipitate of CHI ₃ forms