9. ETHANOL & BENZYL ALCOHOL
(CH_3-CH_2-OH) ( CH_2OH)

→ Perform Idoform test

RESULT:

→ ETHANOL → Yellow ppt

BENZYL ALCOHOL → NO Rxn.

10. ETHANOL & PHENOL

→ Idoform test.

→ React with neutral $FeCl_3$

RESULT:

Idoform : ETHANOL — Yellow ppt
PHENOL — No Yellow ppt.

$FeCl_3$ ETHANOL — No rxn.
PHENOL — Purple color sol^n

1 PHENOL & CYCLOHEXANOL
() ()

→ React with Neutral $FeCl_3$ (same as 10)

→ React with Bromine water.

RESULT:

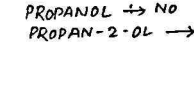
PHENOL → Decolour Br water, white ppt
CYCLOHEXANOL → NO reaction

12. PROPANOL & PROPAN-2-OL

→ Perform idoform test.

RESULT:

PROPANOL → NO Rxn.
PROPAN-2-OL → ✓ because -OH grp is attakued to a Carbon which is attached to a SP^3 carbon



⇒ Always undergo Idoform test.

13. OTHER DISTINGUISH BY Iodoform test

13. Butanol & Butan-2-ol.
$CH_3CH_2CH_2CH_2OH$ ✗
 ✓

14. Formaldehyde & Acetaldehyde
HCHO ✗
 ✓

15. Benzaldehyde & Acetaldehyde
 ✗
 ✓

16. Benzaldehyde & ACETOPHENONE
 ✗
 ✓

18. 3-PENTANONE & 2-PENTANONE
CH_3CH_2-CO-CH_2CH_3 ✗
 ✓

19 ACETOPHENONE & BENZOPHENONE
 ✓
 ✗

20. ETHANOL & ACETIC ACID
(C_2H_5OH) (CH_3COOH)
 ✓
 ✗

** Refer on next page