

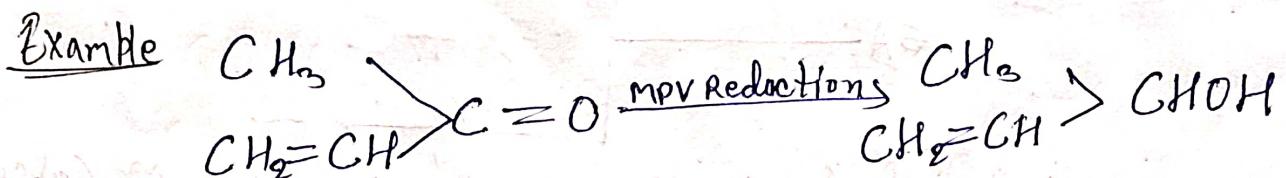
D. B. College (Jaynagar) Lect - 6

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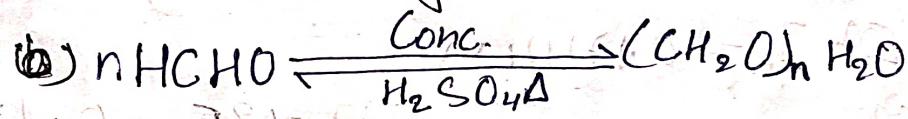
Reduction with aluminium isopropoxide in excess of isopropanol is called MPV (Meerwein-Ponndorf Verley) reduction groups are not attacked like  $-NO_2$ ,  $-CH=CH_2$ ,  $-C\equiv C-$ .



(E) Reactions given by only aldehydes:

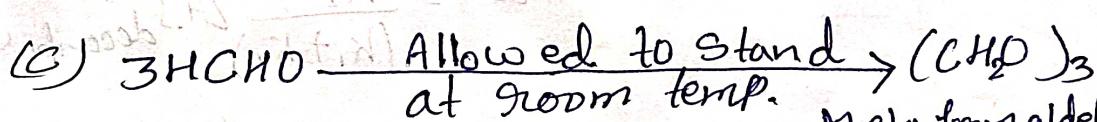
(1) Polymerisation if it is a reversible process

Formaldehyde (

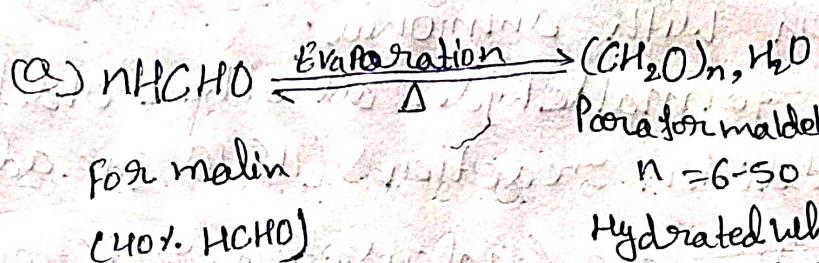
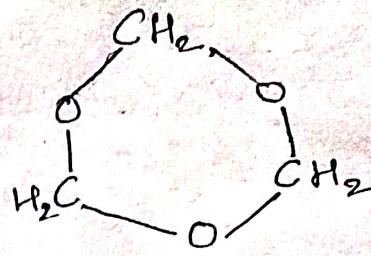


Poly oxy methylene

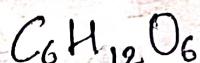
$n > 100$



Meta formaldehyde (Trioxane)  
cyclic Polymer (Trioxy methylene)  
cyclic Polymer doesn't show reducing character with Tollens reagent etc.

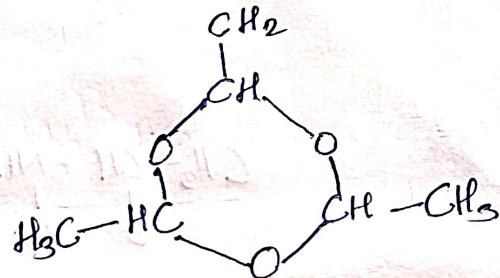


paraformaldehyde is a linear Polymer which shows reducing character with Tollens reagent, Fehling solution etc.

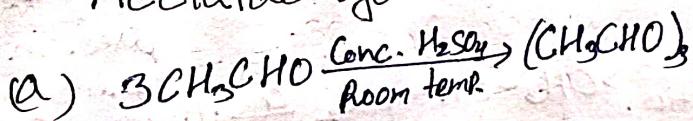


for mase Sugar

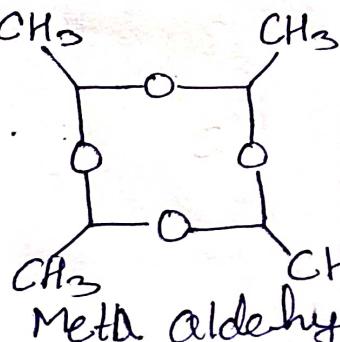
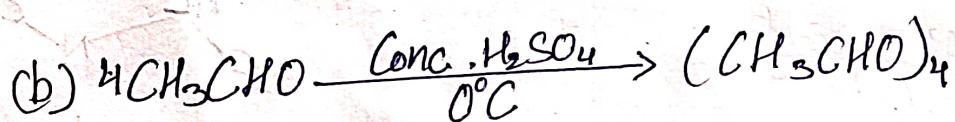
A Linear Polymer ( $\alpha$ -acrose)



Acetaldehyde:



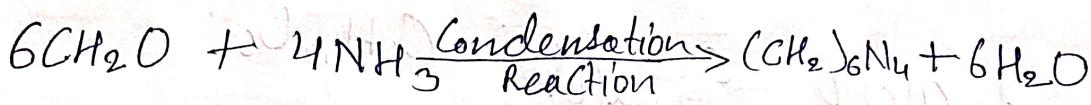
para acetaldehyde  
Paraldehyde (cyclic Polymer)  
Pleasant Smelling liquid  
Hypnotic Compound



White crystalline solid  
Cyclic Polymer  
Used as solid fuel or  
killing Snails

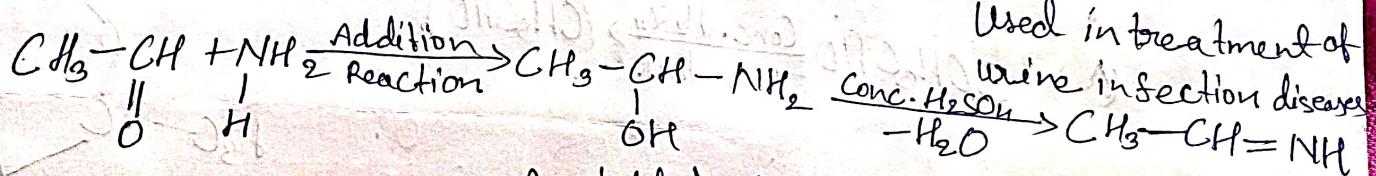
#### (4) Reaction with ammonia:

Except for formaldehyde, all other aldehydes give addition reactions (HCHO give addition elimination i.e. Condensation reaction).



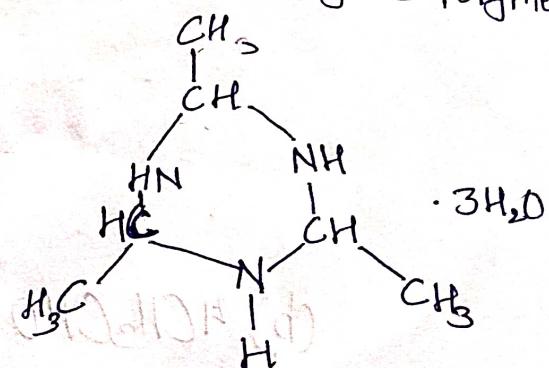
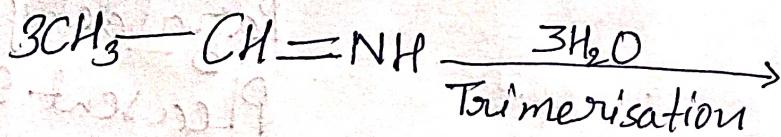
Urotropin (hexa  
-mine)

white crystalline solid  
Used in preparation  
of Explosive.



Acetaldehyde  
ammonia

Acetaldimine  
used in preparation  
of Cyclic Polymer



Trimethyl hexahydro Triazine  
trihydrate