Preparation of urea formaldehyde resin.

THEORY Urea formaldeligide resin is prepared by the condensation reaction relationships the condition reaction relationships the condition relationships the condensation relation relation relationships the condensation relation relation relationships the conde THEORY Urea formaldehyde resin is proper or alk *p 1 aline conditions between urea and formaldehyde in neutral or alk *p 1 aline conditions between urea and formaldehyde formation of resin are monomethylol and decided the formation of the forma between urea and formaldehyde in headan are monomethylol and dinner products formed during the formation of resin are monomethylol and dinner products formed during the formation of resin are monomethylol and dinner products formed during the formation of resin are monomethylol and dinner products formed during the formation of resin are monomethylol and dinner products formed during the formation of resin are monomethylol and dinner products formed during the formation of resin are monomethylol and dinner products formed during the formation of resin are monomethylol and dinner products formed during the formation of resin are monomethylol and dinner products formed during the formation of resin are monomethylol and dinner products formed during the formation of resin are monomethylol and dinner products formed during the formation of resin are monomethylol and dinner products formed during the formation of th $NH - CH^{5}OH$ $NH - CH_2OH$ ylol ureas.

eas.

$$| HCHO |$$
 $| C = O |$
 $| C = O |$
 $| C = O |$

Urea

Formaldehyde

 $| C = O |$
 $| C$

Polymerization can take place from mono or dimethylol urea, or possi through both, with the formation of long chains.

Theromosetting of the resin takes place during the moulding process. For mould the methylol derivatives are compounded with fillers, plasticizers, pigments etc. then are subjected to heat and pressure, resulting into a hard, infusible product. Af cross linked urea-formaldehyde resin can be represented as

Urea-formaldehyde resin (Cross linked polymer)