



Hardener

Hardeners speed up and control the polymerization of amino resins.

All our hardeners are latent and chlorine free. They reduce the pressing time needed for the curing of resins and guarantee a good pot life to the impregnation bath.

Dosage is recommended according to the required reactivity in the resin bath.

NAME	SPECIFIC FOR		BENEFIT
HIPE®ADD H210	UF Resin	MF Resin ✓	<ul style="list-style-type: none"> ■ Very high reactivity even at low dosage ■ Suggested for very short pressing cycles
HIPE®ADD H350		✓	<ul style="list-style-type: none"> ■ Good balance between costs and performances ■ Medium reactivity hardener
HIPE®ADD H500		✓	<ul style="list-style-type: none"> ■ Super latent hardener ■ Improves resin flow ■ Extends shelf life of catalyzed resins and impregnated papers ■ Specially suggested for flooring application or embossed laminates ■ Specifically developed for LPL
HIPE®ADD H101	✓		<ul style="list-style-type: none"> ■ Medium reactivity
HIPE®ADD H277	✓	✓	<ul style="list-style-type: none"> ■ High reactivity

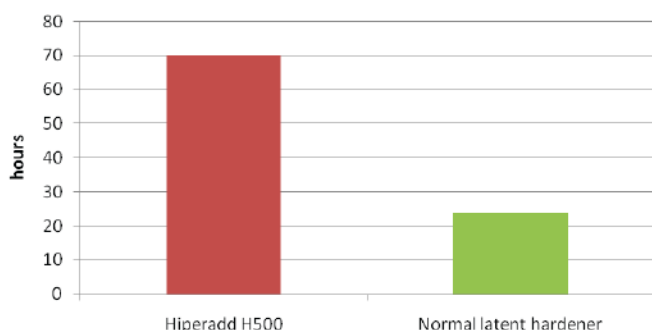
HIPE[®]ADD H500

HIPE[®]ADD H500 is a latent hardener for MF resin in LPL applications. Developed to be active only at high temperatures it avoids the pre-reticulation of the resin during the impregnation that might cause surface problems like heat lines and lack of homogeneity and gloss. It also optimizes the resin flow especially in the production of embossed laminates.

This peculiar hardener, due to its strong latency, must be dosed into the MF impregnation bath in order to reach a turbidity time between 8 and 10 minutes. The product, under the press at high temperatures, starts its activity and guarantees optimal catalysis of the impregnated paper with no need to change the normal pressing cycle.

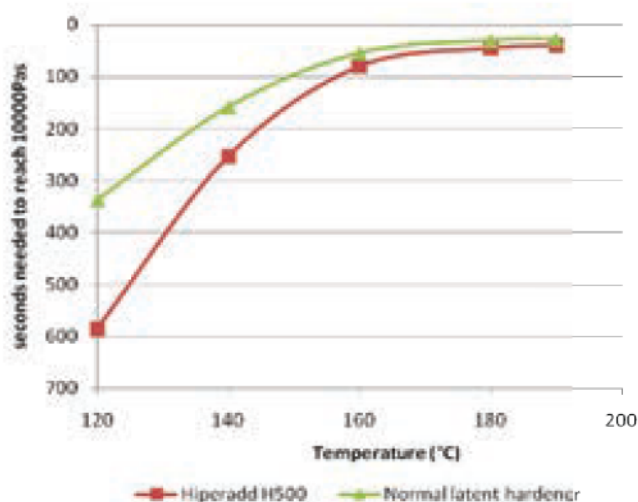
Resin pH is higher using H500 compared to standard hardeners leading to a longer shelf life of the impregnated bath, as shown in the comparative graph below:

MF resin's pot-life

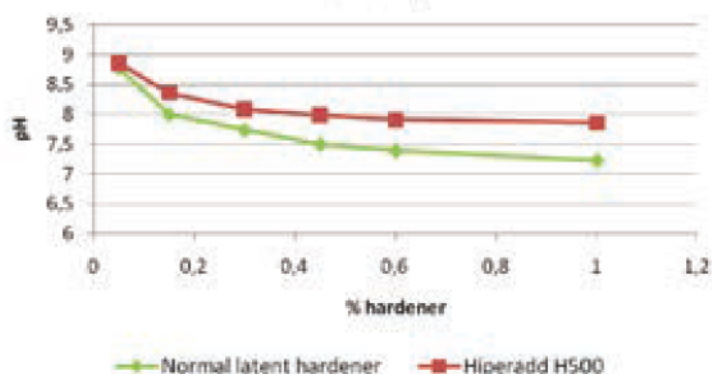


A same amount (0,5%) of a standard latent hardener and of H500 has been added to the MF liquid resin to check the pot life limit of the resin. Using HIPE[®]ADD H500 the resin pot life is doubled.

Curing speed of MF resin



MF resins's pH



Also life of the impregnated decorative papers is extended as the activity of the hardener is almost blocked at room temperature. HIPE[®]ADD H500 speeds up at the increasing of temperature and performs as any latent hardener, once reached the working conditions. This behavior guarantees optimal resin flow combined with complete curing after pressing.