



PT. KOYOLEM INDONESIA

Head Office & Factory :
Jl. Lemindo No. 1, Cikuda - Wanaherang, Gunungputri - Bogor 16965 - Indonesia, Telp. (+62 21) 5033 5555 (Hunting), Fax, (+62 21) 8686 0017

TECHNICAL DATA SHEET

KOYO BOND KR-560

Aqueous Polymer – Isocyanate Adhesive

Product Identification

General or Generic ID	:	Aqueous Polymeric Emulsion
Hazard Classification	:	Not applicable

Chemical / Physical Properties

Physical state	:	Liquid
Typical Viscosity	:	150 ps at 25° C
Non-volatile content	:	43%
Solvent	:	None
Solubility in water	:	Soluble in water
Specific Gravity	:	1,14
Vapor Density (Air = 1)	:	Heavier than air

Fire / Explosion Hazard Data

Flash Point	:	Not applicable
Explosive Limit	:	Unavailable
Boiling Point	:	100° C

Reactivity

Hazardous Polymerization	:	Cannot occur
Stability	:	Stable
Incompatibility	:	Avoid contact with strong alkalis, strong mineral acids

Protective Equipment Ventilation

Use with adequate ventilation and wear a mask, goggles and clean rubber gloves to avoid contact with eyes and skin.

Emergency Action

<u>If on skin</u>	:	Thoroughly wash exposed area with soap and water, if irritation or rash develops, get medical attention.
<u>If in eyes</u>	:	Flush with large amount water, lifting upper and lower lids occasionally.
<u>If swallowed</u>	:	Immediately drink two glasses of water and induce vomiting by placing finger at back of throat. Get medical attention immediately.



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Koyo Bond KR-560 combined with Crosslinker AP is specially developed grade for hard wood lamination, which has formally been covered by KR-134 and KR-7800. KR-560 has equivalent initial and final adhesion strength at lower price than KR-134. KR-560 is especially suitable for rubberwood lamination as well as other hard wood like melanti, ramin, oak, ash, etc.

1. Characteristic Properties of KR-560

- a. KR-560 requires no heat for curing under ambient temperature.
- b. KR-560 requires only a short time for pressing. Required press time varies depending on species of wood, ambient temperature and moisture content of wood, but is generally between 30 and 60 minutes.
- c. KR-560 has neutral range of pH value. Therefore, contamination of wood can be avoided in most cases.
- d. KR-560 is a water based adhesive which allows cleaning of equipment and tools simply by water. In addition, it does not contain any dangerous chemicals like phenol, heavy metal and formaldehyde.
- e. Cured KR-560 is tough but somewhat soft and flexible property that gives less damages to blades of saw and other equipment in the processes followed.

2. Physical Properties of KR-560 and Crosslinker AP

	KR-560	AP
Appearance	White fluid	Dark brown fluid
Viscosity at 25° C (ps)	150 ± 30	1,5 ± 0,2
Solid content (%)	43 ± 3	-
pH	7 ± 1	-

3. Storage and Handling

Store inside warehouse to avoid direct sunlight. Keep in tightly close container in a cool but frost free place. Storage life is 6 months.

4. Standard Packing

a. Resin

Weight (kg)	Packing
20	Dus/Box
220	Drum
1100	Tank

b. Crosslinker

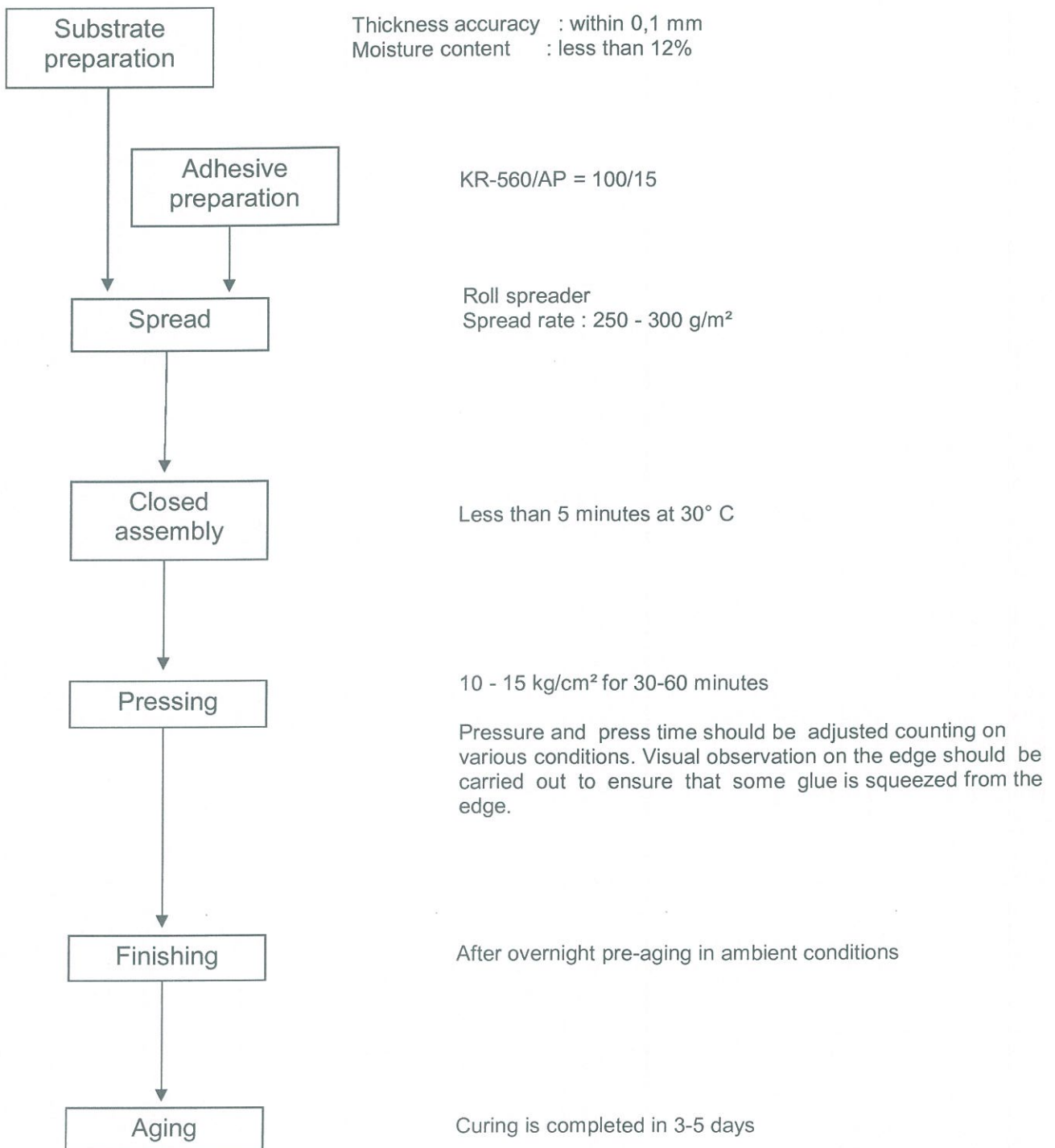
Weight (kg)	Packing
3	Jerigen
35	Pail
165	Drum



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5. Process Flow Chart





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6. Typical Bonding Conditions for Typical Wood Species

	Board - leaf trees		Needle - leaf tree
Wood species	Birch Oak White ash Beech Hard maple Matoa Elm	Rubber Melanti Ramin Alder Pelpok	Pine Cedar Spruce Douglas fir Hemlock Agatis
Press time	60 minutes	30 minutes	20 minutes
Pressure	15 kg/cm ²	12 kg/cm ²	7 kg/cm ²

Note :

- * For so called "Hard-to-Bond wood species" like teak, kalin, sungkai, KR-560 may not have enough adhesion strength. Please refer to the brochure of KR-7800/AJ-1.
- * Actual press time should be determined by experiments.

7. Certification and Document Support

- DIN EN 204 for classification in durability class D4.
- Formaldehyde Emission : - F☆☆☆☆ JAIA 001824
 - Accordance with JIS A 6922-2003
- RoHS and material declaration certificate.

Further information and samples will be provided upon your request. Bonding condition consultation and evaluation test of your products are very welcomed to test in our lab. For any assistance please contact to our company contact number as above.