TIMBATECH 024
UF RESIN PART A

DESCRIPTION

TimbaTech 024 is a liquid Urea Formaldehyde resin which is reacted with hardener as a two pack adhesive system. It can be used with a variety of filled or unfilled powder or liquid hardeners depending on the application. The cured resin is highly water resistant and is used in many aspects of solid timber joinery; furniture construction and door manufacture where strong stable bonds are required.

TimbaTech 024 is a high quality proven adhesive system exhibiting excellent bond strength, very high water/humidity and heat resistance. It has excellent sandability and wood stain/lacquer acceptance. It allows longer Open Time for assembly than the PVA and Crosslink PVA adhesive systems. Clear glue lines can be achieved with the use of either unfilled powder or liquid hardener systems. It is recommended for all joinery work where a non-creep, high bond strength, rigid glue line is required. It is suitable for use in veneering, door panel, standard and moulded plywood manufacture. The resin hardener system can be modified to suit individual applications.

FEATURES AND BENEFITS

- High water / Humidity Resistant bonds.
- Very High Bond Strength
- Non flammable.

APPLICATIONS

- Bench work and assembly gluing.
- Edge joining solid timber, for example bench tops, table tops, legs, posts
- Chair frame assembly
- Finger joining for both internal and protected external use applications
- Doors - pressing plywood or hardboard to timber frames
- Veneer to particle board pressing
- RF cure pressing of veneer/plywood assemblies
- Curved Plywood

Ensure adequate tests are conducted before using commercially.
Mix thoroughly before use.

APPLICATION INSTRUCTIONS

The resin and hardener should be well mixed just prior to usage. The mixed glue has a limited pot life depending on the hardener selected and the temperature of the mixed resin and ambient temperature. Apply the mixed glue to one surface of the joint assembly, bring together and apply pressure. The maximum closed assembly time will vary from 10 to 20 minutes depending on temperature. Assembly time is reduced by higher temperature or if the wet glue is exposed to the air. Spread rate is 17Kg/100m² for each glue line for normal work, however it should be increased by at least 2Kg/100m² for rough or porous species. The moisture content of the timber should be below 12% preferably 8-10%. It is also important that the moisture content be uniform between the pieces being bonded.

Hardeners

A range of hardeners are available for slow, medium and fast sets, including filled, unfilled and liquid forms. These are selected for cold presswork depending on the ambient temperature and the particular application.

	Fast	Medium	Slow
Filled	UF Resin (Winter)	UF Resin (Summer)	-
Liquid	UF Resin	UF Resin	-

Mixing Ratios

UF Resin	Hardener	Parts by Weight	Parts by Volume
100	Winter/Summer	10	33
100	Liquid Winter Liquid Summer	5	6

PVA Modification

It is an accepted practice to add PVA to Urea adhesives to increase flexibility and improve wetting in structural joint application e.g., chairs. We recommend only high solids unfilled PVA eg.ECG5000 for this addition. This product can beadded up to 10% on the weight of the Urea resin. AV101.AV101 should be thoroughly mixed into the UF Resin, prior to adding the selected hardener.

PROPERTIES

Type	Urea Formaldehyde
Solid	High
Viscosity	Medium

PRECAUTIONS

Please note that Blackwood and Beech timbers are susceptible to stain development and discolouration from UF hardeners.

CLEAN UP

Wipe excess glue from joints with clean wet cloth before glue sets. Clean up excess and equipment with water prior to setting.

STORAGE AND HANDLING

Keep containers sealed and store out of direct sunlight. Liquid Resins can be stored for up to 4 months in original unopened containers below 25°C. Storage at a higher temperature can reduce this time substantially. The Hardeners can be kept for 2 years if properly sealed. Store liquid hardeners in sealed plastic bottles/containers. Powdered hardeners must not be allowed to settle and the ingredients separate. Mix if there is any doubt. For small quantities keep well sealed in refrigerator. Do not store below 5°C or freezing conditions. When the resin is to be used, allow the required amount of resin to come to room temperature before adding Hardener for use. Storage areas to be well ventilated and comply with Local, State and Federal regulations.

POT LIFE

Filled (Powder) Hardener Systems				
Temperature	**Winter**		**Summer**	
	Pot Life	**Clamp Time**	**Pot Life**	**Clamp Time**
35°C	**-**	**-**	**45 minutes**	**3 hours**
30°C	**10 minutes**	**90 minutes**	**60 minutes**	**4 hours**
25°C	**15 minutes**	**90 minutes**	**75 minutes**	**5 hours**
20°C	**30 minutes**	**2 hours**	**105 minutes**	**7 hours**
15°C	**60 minutes**	**4 hours**	**3 hours**	**12 hours**

Liquid Hardener Systems				
Temperature	**Winter**		**Summer**	
	Pot Life	**Clamp Time**	**Pot Life**	**Clamp Time**
35°C	**-**	**-**	**45 minutes**	**3 hours**
30°C	**10 minutes**	**90 minutes**	**60 minutes**	**4 hours**
25°C	**15 minutes**	**90 minutes**	**75 minutes**	**5 hours**
20°C	**30 minutes**	**2 hours**	**105 minutes**	**7 hours**
15°C	**60 minutes**	**4 hours**	**3 hours**	**12 hours**

These times are indicative only and will vary slightly depending on the age of the resin and the actual temperature of the mixed resin. As a general rule the clamp time is four times the pot life. However pressure should be maintained until the glue squeezed out at the joint has hardened. We recommend that glued assemblies be stored for 24 hours after removal from the press before further working.

HEALTH AND SAFETY

Please refer to Material Safety Data Sheet available on our Website www.timbatechsolutions.com

OTHER TECHNICAL INFORMATION SPECIFIC TO THIS ADHESIVE

Adequate tests should be carried out on any new or unfamiliar applications to ensure this product is suitable for the specific task.
Samples are available free of charge to assist this procedure.

Material Safety Data Sheet available on request.

Disclaimer – The statements made herein are based on our experience gained to date. They are to be considered as information without obligation. Please test and establish for yourself our product's suitability for your particular purposes. No liability exceeding the value of our product can be derived from the foregoing statements. This also applies to the technical advisory service, which is rendered free of charge and without obligation