# ANCHOR AnchorResin 1564 Hardener

#### **TECHNICAL DATASHEET**

Anchor 1564 hardener is to be used in conjunction with Anchor UF Resin Ultra 1530. It's a formaldehyde binding, filled liquid hardener. Anchor 1564 is recommended for veneering, board on frame bonding and for production of curved plywood assemblies. Anchor 1564 gives relatively long assembly times and pot lives. Suitable for hot bonding operations and can be used under radio frequency heating conditions.

The Anchor 1530 and 1564 mix can give glue lines of durability class C3 according to EN12765/EN205 and MR quality according to BS12O3. IT is a prerequisite that the gluing is done at hot conditions and that the glue line is fully cured.

The hardener is formulated with a view to be used in automatic mixing equipment, preparing small batches of resin and hardener. It it not recommended to mix larger batches by hand, as the heat evolved will raise the temperature of the glue mix, thus reducing the pot life.

#### Application

Mixing- it is recommended that all mixes should be gauged by weight and not by volume. Mixing may be undertaken by hand although for larger mixes, mechanical mixing is recommended. The mixed adhesive can be applied by brush, roller, hand applicator or mechanical rollers.

### **Surface Preparation**

Ensure all surfaces to be bonded are clean and free from dust. Oily timber should be wiped with an appropriate detergent or degreasing solvent. The ideal moisture content of the surfaces to be bonded should be between 5% and 15% with a moisture differential between surfaces of no more than 3%.



#### **Technical Data**

- Appearance greyish white viscous liquid
- Viscosity at 25C, mPas 1500-5000
- pH 4.0-4.5
- Density at 25C, g/cm3 ca 1.21
- Shelf life at 20°C 3 months

## **Mixing Ratios**

The hardener is mixed with the Anchor 1530 at a 20% mix if weighed but at a 22% mix if being measured volumetrically.

It is warned against changing the hardener dosage, e.g. to obtain a longer pot life or shorter pressing time. The correct hardener dosage is important, for several reasons. If the glue mixture is not suitable, contact our technical team for a recommendation.

#### Pot Life for Anchor UF Resin 1530

The pot lives of the glue mixture made with Anchor 1530 and Anchor 1564 vary depending on temperatures, details shown in the table below.

10°C	8 hours
15°C	4 hours
20°C	2 hours
25°C	1 hour
30°C	30 minutes

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### **Pressing Times for Anchor UF Resin 1530**

The pressing times of Anchor UF Resin with Anchor Resin 1564 Hardener, at different temperatures are given in the table.

70°C	150 seconds
80°C	90 seconds
90°C	70 seconds
100°C	55 seconds
110°C	40 seconds

The pressing times (basic setting times) stated refer to glue line temperature only and allowance must be made for the heat to travel from the press platens. The heat penetration time will vary depending on press temperature, the heat capacity of the press, the heat transfer of the wood material and distance on the farthest glue line.

When veneering with veneer thicknesses below 1mm, the heat transfer at temperatures above 100°C can be calculated to be 1-2 seconds per 0..1mm veneer thickness. For other application the table below can be used as a guide to the additional; time required for low and medium density timbers.

Press Temperature	Additional distance per mm distance to furthest glue line
70°C-80°C	2 minutes
90°C-100°C	70 seconds

The pressing times apply when bonding soft wood. Denser and less absorbent materials, such as hardwoods and special particleboard grades (moisture resistant) require extended pressing times.

On the other hand the gluing of absorbent materials, such as low density woods, fibre board, particleboard, etc can be done with shorter pressing times.

Because so many local conditions affect the pressing times, it is recommended to establish the correct pressing times by running trials using your own equipment.

## **Health and Safety**

Reference is made to the material safety data sheets for Anchor 1540 and Anchor 1564. When the adhesive and hardener are mixed a chemical reaction will start. The pH of the mixture will be in between the values for the adhesive and the hardener. The free formaldehyde content of the adhesive will be reduced. The acid/salt concentration of the hardener will be diluted.

When handling the adhesive, hardener and the glue mix it is recommended that certain precautions normally taken when handling chemicals are observed. Skin contact with the uncured glue should be avoided, since persons with particularly sensitive skin may be affected. It is recommended to wear protective gloves and eye protection when there is a risk of splashing. hands and forearms should be thoroughly washed with soap and warm water at the end of the working day. Adequate ventilation of the workshops be maintained.

## **Caution**

Anchor adhesives and hardeners are safe to handle provided that certain precautions normally taken when handling chemicals are observed. The uncured materials must not, for instance, come into contact with food or food utensils. Measures should be taken to prevent the uncured materials from coming into contact with the skin, since people with particularly sensitive skin may be affected. The wearing of impervious rubber or plastic gloves and eye protection is necessary. The skin should be thoroughly cleansed at

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the end of each working period by washing with soap and warm water, the use of solvents is to be avoided. Disposable paper towels should be used to dry the skin. Adequate ventilation of the working area is recommended. These precautions are described in greater detail in the safety data sheets which are available from our website or on request.

#### Disclaimer

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