

NIGHTINGALE SUPPLY

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TECHNICAL DATA SHEET

GRASP UF 62

Urea Formaldehyde - Resin

- **DESCRIPTION:**

IS A 2 PART SYNTHETIC RESIN ADHESIVE DESIGNED FOR USE IN THE WOODWORKING TRADE WHERE HIGH WATER RESISTANCE AND MAXIMUM JOINT STRENGTH ARE REQUIRED.

- **SPECIFICATION:**

APPEARANCE:	HAZY WHITE
VISCOSITY:	APPROX. 500cps
SOLIDS:	APPROX. 62%
SPECIFIC GRAVITY:	APPROX. 1.2
CLEAN UP:	WATER WHILST WET, OR IF DRIED SANDING.
SHELF LIFE:	APPROX. 4 MONTHS

- **DIRECTION FOR USE:**

GRASP UF 62 RESIN SETS BY CHEMICAL REACTION WITH A LIQUID OR POWDER HARDENER. AFTER MIXING RESIN AND HARDENER, THE MIXED GLUE HAS A LIMITED WORKING LIFE OR POT LIFE, WHICH IS DEPENDENT ON AMBIENT TEMPERATURE AND THE GRADE OF HARDENER USED.

HARDENERS ARE AVAILABLE IN FAST, MEDIUM AND SLOW GRADES TO SUIT INDIVIDUAL REQUIREMENTS OVER A RANGE OF TEMPERATURES.

THE TABLE ATTACHED SHOWS THE MIXING RATION OF RESIN TO HARDENER FOR THE AVAILABLE RANGE OF HARDENERS AND THE POT LIFE OF THE MIXED GLUE AT VARIOUS TEMPERATURES.

AVOID CONTAMINATION WITH OTHER ADHESIVES.

AVOID CONTACT OF MIXED GLUE WITH THE FACE OF LAMINATED PLASTICS, AS SURFACE DAMAGE MAY OCCUR.

- **TIMBER PREPARATION:**

TIMBER SHOULD HAVE A MOISTURE CONTENT IN THE RANGE OF 7-13% AND SURFACES TO BE BONDED SHOULD BE CLEAN, DRY AND FRESHLY MACHINED. SURFACE IMPERFECTIONS SUCH AS BURNS, GLAZE AND RAISED OR TORN GRAIN SHOULD BE AVOIDED.

WHERE PRACTICABLE, A LIGHT SANDING IS RECOMMENDED BEFORE GLUING. ALL JOINTS SHOULD BE CLOSE FITTING, ALTHOUGH THE USE OF GAP FILLING HARDENERS WILL ALLOW SLIGHTLY INCREASED TOLERANCES.

NOTE: PRESENCE OF IMMUNISING CHEMICALS SUCH AS BORAX IN THE TIMBER MAY INTERFERE WITH THE SETTING OF UF RESINS AND TESTS SHOULD BE CARRIED OUT TO CONFIRM SUITABILITY OF ADHESIVE ON SUSPECT TIMBER.

- **MIXING:**

ADD THE HARDENER TO THE RESIN IN THE RECOMMENDED PROPORTIONS AND MIX THOROUGHLY. GLUE SHOULD BE MIXED IN TINPLATE, ENAMEL, GLASS, EARTHENWARE OR PLASTIC CONTAINERS. COPPER AND BRASS UTENSILS SHOULD BE AVOIDED.

MIX ONLY SUFFICIENT GLUE FOR USE WELL WITHIN THE WORKING LIFE SHOWN IN THE TABLE.

ALLOW MIXED GLUE TO STAND FOR APPROX. 10 MINUTES BEFORE USE. IF NECESSARY UP TO 5% WATER MAY BE ADDED TO THE MIX TO FACILITATE SPREADING.

WASH CONTAINERS AND UTENSILS WITH WATER IMMEDIATELY AFTER USE.

- **SPREADING:**

GLUE MAY BE APPLIED BY BRUSH, ROLLER OR MECHANICAL SPREADER. AN AVERAGE GLUE SPREAD OF 3-5 SQUARE METRES PER LITRE IS RECOMMENDED. THE HEAVIER SPREAD IS RECOMMENDED FOR LONGER ASSEMBLY TIMES, HIGHER AMBIENT TEMPERATURES AND FOR ROUGH OR POROUS SURFACES.

GENERALLY IT IS ONLY NECESSARY TO APPLY GLUE TO ONE SURFACE OF THE JOINT., ALTHOUGH WHERE PRACTICABLE, SPREADING BOTH SURFACES IS RECOMMENDED.

- **ASSEMBLY TIME:**

IS THE PERIOD BETWEEN SPREADING THE GLUE AND THE APPLICATION OF PRESSURE. **PERMITTED ASSEMBLY TIME** WILL DEPEND ON THE TYPE AND MOISTURE CONTENT OF TIMBER, AND ON AMBIENT TEMPERATURES AND HUMIDITY.

OPEN ASSEMBLY TIME, WHERE THE SPREAD SURFACES ARE LEFT EXPOSED, SHOULD NOT EXCEED TEN (10) MINUTES UNDER MODERATE CONDITIONS .

CLOSED ASSEMBLY TIME WHERE THE SPREAD SURFACES TO BE BONDED ARE BROUGHT TOGETHER BUT ARE NOT UNDER PRESSURE, SHOULD NOT EXCEED THIRTY (30) MINUTES UNDER MODERATE CONDITIONS.

AT HIGHER TEMPERATURES THE PERMITTED ASSEMBLY TIME WILL BE REDUCED. UNDER ALL CONDITIONS, THE GLUE LINE MUST NOT BE ALLOWED TO DRY OUT BEFORE THE APPLICATION OF PRESSURE.

THE PRESENCE OF GLUE SQUEEZE OUT AFTER PRESSURE IS APPLIED GENERALLY INDICATES THAT PERMITTED ASSEMBLY TIME HAS NOT BEEN EXCEEDED.

- **PERIOD UNDER PRESSURE:**

PRESSING TIME WILL VARY WITH TEMPERATURE AND WITH THE GRADE OF HARDENER USED, BUT WILL GENERALLY BE APPROX. 2-3 TIMES THE POT LIFE OF THE GLUE MIX AT THE SAME TEMPERATURE (SEE TABLE).

PRESSURE PERIOD FOR STRESSED ASSEMBLIES SHOULD BE INCREASED BY 50%.

ADEQUATE PRESSURE SHOULD BE APPLIED BY HYDRAULIC OR SCREW PRESS, CLAMPS OR SCREWS, TO ENSURE CLOSE CONTACT BETWEEN THE JOINT SURFACES AND A UNIFORMLY THIN GOUE LINE. THICK GLUE LINES WILL RESULT IN CRAZING AND WEAK JOINTS. PRESSURE SHOULD BE MAINTAINED UNTIL GLUE SQUEEZE-OUT IS QUITE HARD.

IN ALL CASES AFTER REMOVAL FROM THE PRESS, GLUED ASSEMBLIES SHOULD BE ALLOWED TO STAND FOR 24 HOURS BEFORE MACHINING, IN ORDER TO DEVELOP FULL STRENGTH.

- **UF RESIN ACCELERATOR AND RETARDER:**

FOR SPECIAL SIUTATIONS UNDER EXTREME TEMPERATURE CONDITIONS, AN ACCELERATOR OR A RETARDER ARE AVAILABLE FOR USE WITH UF 62 RESIN.

THESE MATERIEALS REQUIRE CAREFUL CONTROL OVER ADDITION RATES.

- **STORAGE AND SHELF LIFE:**

GRASP UF 62 RESIN HAS A LIMITED SHELF OR STORAGE LIFE AND SHOULD BE STORED IN A COOL PLACE. AT 20 C THE SHELF LIKE WILL BE APPROX. 3 MONTHS, BUT THIS PERIOD WILL BE REDUCED AT HIGHER TEMPERATURES.

STORAGE IN A REFRIGERATOR WILL EXTEND THE SHELF LIFE OF THE RESIN, BUT IT MUST BE BROUGHT TO AMBIENT TEMPERATURE AT THE TIME OF USE.

DO NOT FREEZE.

AN INDICATION THAT THE SHELF LIFE HAS BEEN EXCEEDED IS THAT THE RESIN BECOMES THICK AND DIFFICULT TO POUR.

IF IN DOUBT ABOUT THE CONDITION OF AGED RESIN, PLEASE CONSULT THE MANUFACTURER OR CARRY OUT BOND TESTS TO DETERMINE ITS SUITABILITY FOR USE.

KEEP CONTAINERS CLOSED WHEN NOT IN USE.

AVOID CONTACT WITH SKIN, EYES AND CLOTHING. SEE SEPARATE MATERIAL SAFETY DATA SHEET FOR DETAILS OF HANDLING PRECAUTIONS.

HARDENERS SHOULD BE STORED IN A COOL, DRY PLACE AND CONTAINERS SHOULD BE KEPT CLOSED WHEN NOT IN USE. UNDER THESE CONDITIONS HARDENERS WILL HAVE UNLIMITED SHELF LIFE.

AVOID CONTACT OF HARDENERS WITH METALS.

The information presented is believed to be accurate, however, no guarantee is implied or given. User should conduct their own testing to determine the suitability of any product for a particular purpose.