



FOUNDRY PRODUCTS: Technical Data Sheet

PRODUCT: Core and Mould Adhesive - Rapibond™

FOUNDRY ADHESIVE

A100 / B200

RAPIBOND A100/B200 is a high strength, two part adhesive system designed for gluing cores to cope and drag components. It may also be employed to fix cope and drag parts to each other where normal core adhesives are too weak or too slow to cure. It is recommended that clamps be used whenever possible.

RAPIBOND A100/B200 combines the advantages of low toxicity, very low odour and high tensile strength with the complete absence of free phenol, free formaldehyde and water. **RAPIBOND** is supplied as two viscous liquids which mix well together but which resist dripping and running during application. The **A100/B200** combination is considered to be of medium reactivity; faster and slower reactivity systems are available on request.

RAPIBOND A100/B200 is normally used at a mixing rate of 1:1 by volume. Under average ambient conditions, this will yield a working time of 3 to 4 minutes with a "gel" time of 1 to 2 minutes more. The cure time will be influenced by sand temperature, volume of the part A/B mix, etc.. It is suggested that a small quantity be premixed before the gluing operation in order that the foundry staff gain a "feel" for the flow and setting characteristics.

The two parts should be thoroughly mixed together in a paper cup or metal tin, using a spatula or the like. Avoid the use of Styrofoam or plastic cups. The well mixed liquid should then be applied to one or both mating surfaces by spreading or "buttering" on. The quantity to apply must be by judgment, based on the print clearance, the amount of excess glue that might exude during core placement, etc.. Bubbles and dry spots should be avoided. Once a smooth layer has been achieved, do not rework the layer as this can cause loss of adhesion between the curing adhesive and the sand substrate. The core should then be set in place and firmly bedded in the adhesive. Optionally, core nails can then be used to firmly fix the core in place. If setting cores in the cope, wait at least 30 minutes before rolling the cope over, to avoid dropping the core.

Laboratory tests have shown that tensile strengths of over 150 p.s.i. can be expected within one hour of gluing, with full strength of 200 p.s.i.+ within 2 to 4 hours.

RAPIBOND B200 is sensitive to moisture and should be kept tightly sealed in its container between jobs.

RAPIBOND A100 and B200 is available in hand held applicators, 5 gallon pails, net 23 Kg. each.

The **RAPIBOND** glue hand dispensing system is designed for those applications where only a few cores or moulds at a time must be glued, or if gluing practice is intermittent. The hand dispensing system consists of two preloaded cartridges of **RAPIBOND A AND**



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RAPIBOND B respectively, a mixing / dispensing tip and a metal locking ring to hold the mixing tip on the cartridges.

The cartridges are designed to dispense the two parts of RAPIBOND GLUE in the correct ratio for best performance. Each cartridge is fitted with a safety cap to protect the contents. These caps should be removed before using the glue. If it is desired to save partially empty cartridges, the mixing tip and locking ring should be removed and the face of each cartridge and safety cap should be wiped completely clean with an appropriate solvent such as **ManKleen BP**. The safety caps should then be reinserted for storage protection.

The dispensing gun is designed to hold the twin cartridges and to apply the proper pressure for accurate mixing.

The mixing tips are a unique design having an internal spiral which guarantees complete mixing at the exit. The exit tip is designed to allow alteration of the exit diameter to dispense a choice of glue bead width.

TO USE: Remove the safety caps from each cartridge. Snap the two cartridges together. Attach a clean, empty dispensing tip to the end of the cartridge. Slide the retaining ring down the mixing tip and screw securely to the cartridge. Insert the assembly into the dispensing gun. Using the trigger, move the twin pistons until they touch the inner ends of the cartridges. Using the trigger, dispense the glue. To unload, retract the pistons from inside the cartridges. Remove the cartridge package. Remove and discard the plastic mixing tip; Remove and clean the retaining ring for the next job. If the cartridges are to be kept for another job, clean the face of the cartridge and the safety caps and reinsert the caps. Store in a clean, dry cool area. Once empty, the cartridges contain practically no product and can be discarded as regular garbage.

NOTE: ONCE THE MIXING TIP IS FILLED WITH GLUE, THE GLUE WILL HARDEN. THESE TIPS CANNOT BE CLEANED AND SHOULD BE DISCARDED. ONCE HARDENED THE GLUE IS COMPLETELY INERT. AN EMPTY TIP SHOULD BE USED FOR EACH GLUING JOB.

