Glue for Fly Tying – a Review via Conversation

Barry and I recently had an email and phone discussion on glue for fly tying. It went something like:

Barry: Bill, I went on line to check who was stocking the Revell glue that most seemed to be using last night. I see there's a few different types available.

Bill: The stuff I've got is "Contacta Professional Liquid glue for plastics". I used to use super glue but the Revell applicator nozzle is brilliant.

Barry: Most plastic model kit type cement is basically a solvent with a retardant to slow down the melting as I understand. So I doubt it would be any good used as an adhesive?

Bill: Was something I thought of myself, but I often get the glue going hard in the nozzle (easy to remove by heating the nozzle up with a cigarette lighter flame) so it may have some 'glue' element.

Bill: Hmm, just did an experiment overnight and the 'glue' won't stick paper together overnight.

Barry: Yeah but thread is a different material altogether.

Bill: Drat, put a bed of thread on a hook and glued it up with the Contacta. Some material deposited in the threads and on shank but no aspect of bonding of thread to thread or thread to shank. Shame as the applicator is nifty – I guess back to Superglue and brush.

Barry: I use CA (Ethyl Cyanoacrylate glue) thin and medium for other construction work. However, the thin or ultra-thin CA can spread through capillary action quite very rapidly if too much is applied. Keep it away from ballbearing swivels. The thicker CA can take longer to cure if used in quantity such as building up a fillet joint.

Bill: But what about precise application, especially injecting into spun deer hair.

Barry: No need to use a brush as the fine tube applicator is an excellent design for precise delivery to the exact bond point

The final words go to Barry:

Medium viscosity CA glue is recommended for gluing parts with a maximum a gap of 0.15mm.

Bolt Thin CA glue is recommended for gluing parts that fit exactly together (maximum gap allowed of 0.05mm). The curing time is 1 sec. This glue is ideal for gluing where capillary effects will allow the glue to penetrate the joint – it has excellent penetration ability. It works where other glues do not glue well (ie: with porous materials). It is ideal for gluing an assembly by applying a drop onto the joint and allowing capillary action to distribute the glue.

Safety/Hazard: It's important that you go on line and get familiar with the handling, use and hazard warnings associated with the brand you plan to use. Super glues are not all the same.

John at Nitrodude (Kambah shops) has extensive experience in the use of conventional and complex adhesives and is more than happy to offer sound advice on this subject. This link will take you directly to the Glue department which from memory I think 65 stock items are available:

http://www.nitrodude.com.au/catalog/product_info.php?cPath=30_56&products_id=8499

Their price is much better than what I have found in the Tackle shops. I also expect that John's stock will be much fresher as he has a good turnover.

I bought the Medium last week as it has good gap filling properties for the Cod flies we are currently tying. I like the thin for the under-bindings to the hook as it leaches right through the thread to the hook wire. Also excellent for the 70 denier and finer used in midge designs.

To be honest Bill, Just grab one of each Thick, Medium and Thin. Keep them in the fridge and they will keep a very long time.

Given the time allocated to tying each fly is relatively short, especially in a semi-commercial environment; the choices of glues are very limited.

Hooks are generally very smooth and often coated. Coated with what? What glue will form a bond with this coating? There is probably as many questions as there are types of hooks with their proprietary coatings! (Revell may have worked on some hooks with a plastic coating, but it won't work too well on the rest of the build process)

I think we have to realistically define the minimum result required.

I could write up a bonding procedure that would produce a result that short of destroying the hook, could not be taken apart. However, the effort required could not be justified! Do we need a bond that is so complete that any attempt to peel/unwind the thread back off the hook shank would be impossible? No.

My thoughts being:

1/ Strong enough bond to hold the under-binding in place on the shank. The subsequent wraps will impart considerable clamping pressure increasing the joint integrity.

2/ Rapid enough cure to enable continuous build process.

3/ Thorough penetration of the thread to thread windings resulting in a solid, strong composite part. ie Body.

4/ CA with its availability in ultra-thin to thick allows bond compatibility throughout the structure process.

5/ 5 Minute epoxy or head cement can still be used over the top to produce the smooth glossy finish where required.

CA is also good where a filler is required. Unlike epoxy where part A & B must be mixed first then the appropriate filler added to the mix; With CA a filler such as fine sawdust can be moulded into the area first then simply add drops of thin CA. The CA will rapidly penetrate and form a solid fill. (The sawdust can be coloured too)

I have spoken to John at Nitrodude as to our requirements, so he is up to curve with our needs.