Sticky Belt Glue and Coating Cheat Sheet

These instructions will work for most fabrics and sticky belt printers. The glue that is recommended will create a resilient, hard, sticky surface. In normal use the surface will last six month or more. If you need a softer surface there are other glues that work better but are not as durable.

Where to Buy the Glue

Purchase sticky belt glue from CGS Sales and Service , they are the American distributor for ATR Chemicals. There are (2) different products that you will need to purchase from then to create a durable tacky surface for most fabrics.

Atramin GO - Part # ATR 1566 (This is the glue)
Resina MC – Part # ATR 1353 (This is a resin, no tack)

We suggest you order at least twice what you think you will need when you first tyr to coat the belt.

Ethyl Acetate is a common commodity chemical that you should buy locally. This is glue thinner and a belt cleaner. You will need at least as much of it as the total of glue and resin. Make sure you have plenty on hand.

Mixing the Glue

For most fabrics, mix the glue as follows: (Volume measurements)
1 part glue (ATR 1566)
2 parts resin (ATR 1353)
3 parts Ethyl Acetate to control viscosity (This may vary. See the notes on Ethyl Acetate)

The rate of application of this final mixture is around 120-150 grams per square meter of belt area. This will total about 1.5 to 2 quarts but will vary based on viscosity of the final mixture and the total surface area of your belt.

The resin component of the mixture is used to control the “tack” of the surface. If you used only the glue (ATR 1566) the tack would be so high that you would not be able to “peel” the fabric from the blanket. If you used only the resin (ATR 1353) there would be no tack at all. You can vary the ratios of the (2) products to control the tack for the

substrate. If you are going to use this for paper, start with a 1 part glue and 3 parts resin ratio rather than the 1 to 2 ratio recommended for fabric.

The glue component has a very high solids content and its viscosity must be controlled to get the proper application. Use more or less of the Ethyl Acetate to get the correct viscosity. The final thickness of the mixture should be that of molasses or very thick syrup.

Resin

The resin also works well for repairing a very damaged blanket. Just apply only the resin to fill the damaged parts of the blanket. This will give you a very even and slick surface upon which you would then apply the final glue mixture.

Ethyl Acetate

Ethyl Acetate is also used to remove the glue and strip the blanket prior to application of the new glue. Ethyl Acetate should be purchased locally. Please see Wikipedia for information on this chemical.

Cleaning the Blanket

The blanket must be absolutely spotless and have no residue or oil film left on it. If there is any dirt or “film” left on the blanket the glue will most likely “lift” from the blanket during use. Do not use any soap or cleanser. We recommend using pumice mixed with water. Pumice may be available at stores like The Home Depot or paint stores.

The point of cleaning the belt is to remove contaminants and to create surface that will help the glue adhere to the belt. The purpose of using pumice is to reduce the slickness of the belt. But be careful not overuse the pumice or use it to create deep scratches.

Prepare to Apply the Glue

Once the blanket is clean make sure to do the following:

a. Have a sufficient amount of glue mixture divided among two or three bottles that can be used to place a controlled amount of glue in front of the doctor blade as the belt turns.
b. Have an alcohol mixture in a squirt bottle. You can mix the alcohol with water.
c. Place masking tape on the edge of both sides of the belt. The tape should be about an inch wide or more. This will act as a dam for the glue and will also prevent the glue from interfering with the mechanical and electronic parts of the belt mechanism.
d. Use a safety mask to avoid breathing fumes from the glue.

Application of the Glue

Start by setting the belt to turn slowly under the doctor blade. Make sure the doctor blade is level and just off the belt at a height just a little greater than the thickness of two sheets of notebook paper. You can use a level (assuming your printer is level.) You can test the height by using some drops of water. If the water won't go under the blade then the blade is too low. But remember the glue is thicker than water, so take that into consideration. If you test with water be sure to dry the belt before proceeding with the glue.

Start applying the glue on the blanket by pouring it evenly across the blade. Keep the glue as close to the blade as possible. Upon starting, get the glue across the blanket quickly. Do not pour all of the glue at one time. Instead, continually add it as you see the reserve in front of the blade getting low.

If the first coat is too thin, it is likely you will have a lot of glue left. In this case you will need to apply a second coat over the already applied film that is not yet dry. To do this without ruining the first coat you will want to squirt alcohol behind the nip. This alcohol will not hurt the glue application but it will act as a lubricant and keep the doctor blade from "chattering" on the sticky film of already applied glue.

As soon as you have made a complete revolution and you are certain that the blanket is completely covered it is critical that the blade be raised quickly and evenly across the blanket. Otherwise you will leave a "ridge" across the blanket. You may want to apply alcohol just prior to lifting the blade to avoid chattering.

Once you have completely covered the blanket leave the rotation on until the application is fully dry.

You can practice and experiment with this procedure on a small section of the belt. Just remove this practice coting prior to coating the entire belt.

Fixing Blanket Defects

Small indented troughs or gouges in the blanket (nickel size or smaller) can be tolerated. But raised specks or imperfections will cause problems because they will keep the squeegee from properly wiping and removing all of the water when the blanket washer is being used. This residual water will be absorbed by the fabric, and the wet fabric will cause the ink to "bleed.."

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Disclaimer and Hazard Notice

You are responsible for getting complete information on the health and safety hazards of these chemicals.

You are responsible for applying the glue in a safe manner.

This document is for information only. The document it is **not guaranteed** to be correct or complete.

The materials referenced in this document may be flammable or dangerous. Some people may have serious reactions to these chemicals. These chemicals may cause serious reactions requiring medical attention. Get information of the chemical hazards from the manufacturers before you proceed.