

## What tools and processes are needed to create the textile composite?

- a collection of material/textiles/fabric
  - for a uniform textile composite, preferably the same textile composition or structure would be used throughout > *need to be tested*
  - for a composite which has different properties, i.e.: soft, hard, flexible, sound proofed, water repellent...
    - it would be possible to change this by the selection of the textile. e.g.: by sandwiching a few layers of very elasticated lycra between a less elastic jersey or woven fabric, the outer textile layers could then be be milled or engraved to the depth of the lycra and create a bend at this point > needs to be tested
    - by the type of bioplastic solution e.g.: with or with our glycerin, then the varying quantities between these > *need to be tested*
    - by the application of process to the composite (depending on the scale of making) these could be drilling, cutting, sawing, milling, etching, lasercutting, engraving > *Milling and drilling have been tested but the rest are yet to be tested*
- a bioplastic solution
  - *As my intentions are for the use of less harmful solutions, although resin works, it can be at the detriment to the environment in its usage as well as in its production. I would recommend this as a last option and hope to find a durable solution elsewhere.*
  - *Gelatin based bioplastic solution did work, however I am confident that a vegetarian option can be found > see my work with bioplastics*
  - Cornstarch & bicarbonate sodium recipe
  - Agar + ? recipes
  - REASERCH NOTES to be added in a PDF + posts
- Clean location
  - Small scale: at home, small design or makers lab/hub > All spaces should have access to
    - water and access to electricity
    - heating vessels and equipment for the bioplastic
    - vessels to put the textile composites in
    - boards and clamps for compressing the composite
    - shelving and storage space for materials collected, samples, equipment,
    - area to dry composite (in some cases to also heat the composite depending on solution)
    - workspace to create with the composite whether dripping or cutting or even forming it
  - Large scale: at a factory, large design or makers lab / university
    - *(All of the above, but on a large and maybe more automated scale)*