

## CONSIDERATIONS WHEN SELECTING ADHESIVES FOR LEATHER CONSERVATION

Much the same as for any other conservation, with some specific needs. There is NO one adhesive which would be suitable for everything.

Must consider condition of the leather/type of tannage (if any)/use of object after conservation and always TEST FIRST

<b>Type</b>	Thermoplastic	No water - so a possible solution for deteriorated leather
	Solvent	Which solvent - not acetone on leather; white spirit OK; think about painted surfaces and finishes which may be solvent based/reversible; remember water is a solvent)
	Reactive	Not usually used in leather conservation (eg two part epoxies)
<b>Glass transition temperature/melting point</b>		Where is artefact going to be used - eg car in South of France
<b>Reversibility or re-treatability</b>		Important conservation consideration
<b>Ageing properties</b>	Discolouration Shrinkage Embrittlement	
	Cross-linkage Durability	
<b>Health and safety considerations</b>	Toxicity	Conservator has to be safe as well as object
<b>Shrinkage on setting</b>		Too much shrinkage could cause repair to fail
<b>Strength of bond</b>	Shear Tensile Cleavage Peel	Which is likely mode of breaking?
	Sacrificial repair	Do you want adhesive to fail or repair material to fail - not original material to split?

<b>Surface area available</b>		How large or small the surface area available will affect the bond strength
<b>Visual appearance</b>		Is adhesive likely to be seen when dry?
<b>Moisture content</b>		Particularly important for leather (especially if deteriorated)
<b>Flexibility</b>		Leather expands and contracts and objects in use might be opened/closed, etc.
<b>Drying time or tack time</b>		Can be important on 3D objects - can be difficult to hold in position
<b>pH</b>		New leather has a pH around 4.5, which often lowers with age/deterioration. An alkaline adhesive could have an adverse reaction.
<b>Viscosity</b>	Less viscous will spread more thinly	How far does it penetrate - how far do you want it to penetrate?
<b>Molecular weight</b>		Higher molecular weights generally afford higher adhesion
<b>Particle size</b>		
<b>Cost, availability and shelf life</b>		Not most important but may need to be taken into consideration
<b>Note - combining adhesives</b> - mixes can give you the best of both worlds eg PVA and wheat starch paste		

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