# Things To Think About When Choosing An Adhesive

### **OBJECT VS. ADHESIVE**

How strong is the object? • How strong is the adhesive?
What is the function of the object? • How suitable is the adhesive?
Is the surface clean of dust/grease? • Does the adhesive flow well?
Does the joint need to hold up? • Is the adhesive long lasting?
How visible is the joint? • Is the adhesive invisible?
How permanent is the joint? • Is the adhesive readily reversible?
Is the adhesive available, non-toxic and safe to use?

#### TYPES OF ADHESIVES AVAILABLE

# **EPOXY RESINS**

- Formed by chemical reaction in situ between two different Ingredients
- Very strong bond
- Permanent in some materials-difficult to reverse
- Turn yellow/ brittle over time
- Apply with glue gun
- Setting time quick/some longer
- EXAMPLES-Devcon 5-minute epoxy Milliput®" Hxtal NYL-1 (glass)

### **MELT -FREEZE**

- Heated, applied to surfaces and joined when freezes to solid
- Weaker bond
- Slightly reversible
- May soften when exposed to heat
- Apply with electric glue gun
- Setting time quick
- EXAMPLES-Paraffin Wax Micro-crystalline wax Bees wax

# **SOLVENT ADHESIVES**

- Adhesive dissolved in a liquid solvent/ when set solvent evaporates leaving adhesive behind
- Strong / semi-strong bond
- May soften in excess heat
- Reversible in solvent
- Application varies
- Setting time varies, not instant
- EXAMPLES-Acryloid B-72 (acrylic) Polyvinyl acetate Cellulose Nitrate CM bond (white glue)