How to use glues and adhesives



Tree glue Hot glue Contact adhesive

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Tree glue

Best for gluing

- Wood
- Paper
- Carton
- Fabric
- Ceramic material





Best for gluing

- Wood
- Paper
- Plastic
- Fabric

Contact adhesive

Best for gluing

- Plastic
- Rubber
- Leather
- Ceramic tiles etc.
- Metal
- Paper
- Wood
- Glass
- Etc.



Tree glue



Safety

- Safe common glue, low risk
- No need for protective equipment
- Avoid unnecessary skin contact

 \rightarrow If glue gets into eyes, mouth or skin, rinse with large amount of water



Properties

- Water-soluble
- Doesn't burn
- Use only inside and in dry places
- Usage in normal room temperature
- Not for wet surfaces



How to use

- 1. Spread thin layer of glue with a brush or a spatula
- 2. Press the parts firmly together (at least for 30 min.)
- 3. Wash away the excess glue
- 4. Let it dry (See the package instructions)

Hot glue



Safety

- High risk of skin burn \rightarrow usage only under supervision
- Cover the working area/surface
- No need for other protective equipment



Properties

- Can be used only when hot
- Dries quickly
- Elastic when melted \rightarrow may leave messy strings
- Requires electricity



How to use

- 1. Plug in the pistol and let it warm
- 2. Pull the trigger and spread the glue onto the object
- 3. Press the parts quickly and firmly together
- 4. Let it dry until the glue cools off

Contact adhesive



Safety

- Flammable
- Irritating
- Requires good ventilation and/or protective mask
- Fumes cause dizziness and sleepiness
- Usage only under supervision



Properties

- Water-resistant
- Oil-resistant
- Best for solid and firm materials
- Drying time depends on material and glue → Read package instructions (varies 10min-1h)
- Excess glue needs to be removed with acetone
- Certain type of plastics cannot be glued (e.g. polyethylene, polypropylene and teflon)



How to use

- 1. Make sure that the area is well-ventilated and protective equipment are used
- 2. Clean and dry the surfaces that are about to be glued
- 3. Spread a thin layer of glue on both surfaces
- 4. Let it dry until the glue is no longer sticky
- 5. Press the parts firmly together

Gluing example: HOT GLUE



- 1. Have the materials ready.
- 2. Plug in the hot glue pistol.



3. Make sure the materials are compatible.



4. Spread the glue on the desired surface.



5. Hold it for a while so that the glue will dry and cool off.

Student exercise

This one aims to make pupils think about different glues and their properties, and also to apply the knowledge they have attained.

The students are asked which glue they would use to attach different kind of materials together, and why they would use that one.

- 1. Two pieces of wood
- 2. Two pieces of fabric
- 3. Fabric and a piece of wood
- 4. Cotton wool to carton
- 5. Two pieces of metal
- 6. Two pieces of plastic

Advisable answers:

- 1. Tree glue
- 2. Tree glue/Hot glue
- 3. Tree glue/Hot glue
- 4. Hot glue
- 5. Contact adhesive
- 6. Contact adhesive

