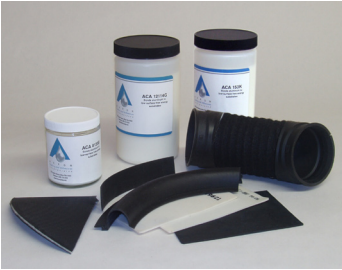


Properties of Heat Activated Adhesives



Heat activated adhesives are particularly appropriate for large production applications. They can be economically applied to wide roll stock at high speeds, and activated later. A relatively light coating weight of these adhesives can provide a very strong bond. Heat activated adhesives frequently have destructive peel values between metals and many plastics of more than 20 lbs./linear inch. This bond is realized as soon as the adhesive becomes solid.

Advantages:

- A low adhesive coating weight saves money on raw material, energy, and increases processing speed.
- Many heat activated adhesives are waterborne, eliminating toxic and volatile solvents.
- No slip-sheet is required to control blocking on roll to roll production.
- Many application methods may be used.
- Pattern coating can be used where needed.
- Poor sealing conditions are readily apparent immediately after the bonding.
- Adhesives are available that provide good adhesion when activated by the heat from an extruder injection molder, or calander.
- Curing systems can enhance heat and chemical resistance.

Disadvantages:

- Bond formation requires precise control of temperature, pressure and time.
- The adhesive must be free of volatile components such as solvents to avoid out-gassing during the heat activation step.
- Testing is required to select the proper temperature, pressure, and time for your application
- The molten adhesive has no strength. It may be necessary to clamp the assembly until the adhesive solidifies.