# **BISON SUPER GLUES**











Superglues are also known by the name of powerglue or wonderglue. Their place in the world of glues is quite a special one. They are spectacular: within just a few seconds an enormous strength is achieved.

### What is superglue exactly?

Superglues are cyanoacrylate-based glues. Cyanoacrylic glues are used in many different industrial branches, from space technology to the medical world. Special qualities are used for specific fields of application. Consumer's glues contain a kind of cyanoacrylate that can be used for a great variety of jobs. And yet the consumer can choose from different sorts of superglue. These glues differ in thickness (fluid or gel) or package (tube or practical dosage pen). And the addition of special ingredients can make one kind of superglue more suitable for a certain material than others.

## How does superglue work?

Any kind of glue changes from a fluid into a solid state. Glue that does not harden will not become strong. This hardening can be achieved by means of drying (the water or solvent in the glue evaporates) or a chemical reaction (the glue reacts with moisture from the material that is glued or from the air and thus hardens). Superglue hardens through a chemical reaction that takes place within seconds. That is how it transforms from a thin fluid into hard plastic. A number of factors must be reckoned with in the hardening process of superglue:

- First of all the material that is to be glued must be covered with a very thin layer of moisture in order to trigger the reaction. In most cases normal air humidity takes care of that.
- Moreover the reaction will only take place in extremely thin layers. A small amount of superglue will do a better job. Too much superglue hinders the reaction and the glue won't harden properly.
- Slightly acidic materials, like wood, also considerably slow down the reaction.

 So-called gel-types are particularly suitable for extremely porous materials. The underlying surface will not absorb this kind of superglue very quickly. However they do need more time to harden.

## Please note!

## **Storage**

Moisture inside the package makes the glue harden. It is therefore of the utmost importance that the package remains firmly closed and is stored in a dry place. At a low temperature, the air can only contain little moisture. In addition the process of a chemical reaction is slowed down. Therefore this glue is ideally stored in a cool place.

#### Clean-up

After use it is best to thoroughly clean the cap and nozzle of the package. Superglue bonds to lots of different materials, so caps and nozzles can get stuck very easily as well.

## **Blooming or Frost**

Sometimes superglue becomes covered by a white substance. This is the result of partial hardening of the glue in the open air. This process leaves a white film on the glued material. The main reason for this is the application of too much glue. If the glued connection is situated in a somewhat closed space where the vaporized glue cannot escape, this white film (that can hardly be removed) may appear.