

# Contact Adhesives

## Frequently Asked Questions



### How does contact adhesive work?

Contact adhesive is a solvent-based adhesive. When applied to the surfaces to be bonded, it evaporates quickly so that the surfaces adhere when pressed together. Once the surfaces touch each other, the adhesive forms a strong, durable bond in a relatively short time.



### What are the properties of contact adhesive?

Contact adhesive has several interesting properties. It is highly resistant to high temperatures and humidity, making it suitable for a wide variety of applications. It also has good resistance to chemicals and solvents. It also facilitates rapid adhesion and strong bonding between materials.



### How do you apply contact adhesive?

To use contact adhesive, you must apply a thin layer of adhesive to each surface to be bonded. Allow the adhesive to dry for a few minutes until tacky to the touch. Then carefully align the two surfaces and firmly press them together. Note that contact adhesive has a high initial adhesion strength, so replacing misaligned parts can be very difficult. Be sure to apply even pressure for maximum adhesion.



### What precautions should I take when using contact adhesive?

When using contact adhesive, it is important to work in a well-ventilated area, as the adhesive contains solvents that can cause irritation. Avoid all contact with the skin and eyes. It is recommended to wear protective gloves and safety glasses during application. Also, be sure to read the manufacturer's instructions carefully before use.



## How much contact adhesive should be applied?

When spraying contact adhesives, you should cover both surfaces with 80% coverage (between 2.0-3.0 dry grams/square foot).

Apply a thicker covering around the edges by applying a second coat. The optimum range is 2.0-3.0 dry grams depending on whether it is a neoprene adhesive (2.0-2.5) or an SBR/SIS adhesive (2.5-3.0). The easiest way to check the amount is to weigh a one-square-meter piece of chipboard and spray it with the adhesive. Let the adhesive dry completely and reweigh the panel. Wait another 5 minutes and weigh the panel again. If the weight has not changed, the liquid has completely evaporated.



## What are the uses for the two different types of contact adhesive?

Common contact adhesive types and their typical uses

### Liquid contact adhesive:

This is an adhesive in liquid form, generally packaged in a bucket or drum. It is used to bond materials such as leather, rubber, plastic, laminate and wood. Liquid contact adhesive can be applied by brush, roller or sprayed with an additional pressure device (varies depending on the product). This type of glue is applied to both surfaces to be bonded, then the surfaces are pressed together to create an instant and strong bond.

### Aerosol contact adhesive:

This adhesive is sprayed from an aerosol can or canister sprayer. It is used in similar applications that use liquid contact adhesive, but the aerosol contact adhesive can be more evenly applied and makes it easier to bond large areas. It is commonly used in woodworking, carpentry work and laying flooring as well as in many other applications.



## What is the difference between neoprene and SBR in a contact adhesive?

Neoprene and SBR (Styrene Butadiene Rubber) are two types of polymers commonly used in contact adhesives. The main difference between these two materials is their resistance to solvents. Neoprene has better resistance to organic solvents, oils and chemical products in general. It is often used for applications requiring high chemical resistance. On the other hand, SBR can be more sensitive to solvents and certain chemicals. Heat resistance: Neoprene offers better heat resistance than SBR. It can withstand higher temperatures without losing its adhesive properties. Neoprene also offers good flexibility and elasticity, which allows it to adhere to irregular surfaces and withstand movement and vibration. SBR can be less flexible and elastic than neoprene.



## What does the open time mean for contact adhesive?

The “open time” or working time refers to the time during which glue can be applied on surfaces before gluing them together. In other words, it is the time the glue can remain exposed to air and still provide the requisite adhesion when the surfaces are finally joined together.



## Why is the VOC content listed?

“VOC content” refers to the amount of volatile organic compounds in a product. VOCs are chemicals that can evaporate at room temperature and be a source of indoor air pollution. The labelling indicates the level of potential emissions of these substances. Products with low levels of VOCs help improve indoor air quality and reduce negative impacts on health and the environment.



## What role does viscosity play in contact adhesive?

Viscosity is an important factor in this glue. Viscosity refers to a fluid’s resistance to flow. A glue with high viscosity means that the glue is thicker and more difficult to spread. It may require additional pressure or specific application techniques to ensure even distribution. A high-viscosity glue is generally preferred for applications that require gap filling, strong adhesion or improved slip resistance. A more viscous glue is generally preferred for post-forming applications.

However, a lower-viscosity glue is more fluid and easier to spread. It can be used for applications requiring light adhesion or where you need to spread the glue thinly and evenly.



## What is the solids content of contact adhesive?

The solids content refers to the amount of non-volatile material present in the glue after the water or solvents have evaporated. It indicates the proportion of solid components in the total amount of glue. A higher solids content means the glue contains more solids after evaporation, which can help increase adhesion and strength. Glues with a high solids content tend to form stronger and stiffer bonds. On the other hand, a lower solids content can make the glue more fluid and easy to spread, but adhesion and bond strength may be reduced.