What is the difference between thermoplastic and thermosetting adhesives?

Detail Introduction :

Many people who do not know much about adhesives do not know much about the difference betwee thermosetting adhesives and thermoplastic adhesives. The two categories of adhesive products are fundamentally different, and because of this difference, there is a big difference in the way they are a and the scope of application. So what is the difference between thermosetting adhesives and thermos adhesives? Here is a brief introduction to you.

Thermoplastic adhesive

Hot melt adhesive is a kind of thermoplastic adhesive, and we know that many adhesives need to be in the process of bonding. For thermoplastic adhesives, heating is to let it melt. Because the thermop adhesive is solid at room temperature, only through heating the thermoplastic adhesive can be melte liquid state on the object's surface to be smoothly laid open to form an effective bond.

The thermoplastic adhesive does not produce chemical changes during the healing process, but only of matter changes to a liquid state, a physical change. Hence, the characteristics of thermoplastic adh reversible, both again after heating or will melt again. Therefore, in general, thermoplastic adhesives certain limit of high-temperature resistance.



Thermosetting adhesives

Thermosetting adhesives also need to be heated when applying glue. Under certain temperature con the chemical substances in the components of thermosetting adhesives will only speed up the chemi reaction and quickly change from a linear molecular structure to a net-like cross-linked structure. Bee the chemical reactions that occur throughout the process, thermosetting adhesives are often called r adhesives.

Because the process of changing from a linear molecular structure to a cross-linked reticulated mole structure is irreversible, the sizing process of thermosetting adhesives is also irreversible. Thermoset adhesives are generally liquid at room temperature and become solid after heating and curing reacti is the opposite of thermoplastic adhesives. This irreversible heating nature of the thermosetting adhe makes it generally better resistant to high temperatures.

In layman's terms, thermoplastic adhesives are heated to melt, while thermosetting adhesives are he cure. Both thermoplastic and thermosetting adhesives have their strengths and weaknesses. The constrength of thermosetting adhesives is generally higher than that of thermoplastic adhesives, and the temperature resistance is also stronger than that of thermoplastic adhesives. However, thermoplasti adhesives are more efficient and cleaner because they are solid at room temperature. They have a w of applications in their different fields. **Related** articles

What to look for when purchasing hot melt adhesive film?

What are the distinct advantages of hot melt adhesive films over other adhesive products that deservatention?