

MOREFORM THERMOSETTING PLASTIC

Moreform is an exciting and versatile mouldable thermoplastic that can be shaped by simply warming in hot water. It cools to a tough nylon-like plastic with a smooth opaque finish. It is suitable for a wide variety of uses, from modelling and fine arts to design & technology components and prototypes. Its easily accessible melting temperature also makes it an ideal teaching aid to demonstrate polymer processing.

Instructions

Pour the more form pellets into a container of hot water. There is no need to boil the water as the plastic will melt at around 60°C. The pellets will sink to the bottom of the container and begin to fuse together. When the pellets become translucent, the moreform is ready to use. Remove the plastic from the water with tongs or a spoon and carefully squeeze out any excess water. Take care at this point as the plastic and the water will be hot - wear gloves if necessary. The moreform will quickly cool until it can be comfortably worked by hand. The plastic can be safely handled while still quite warm, as the plastic does not conduct much heat to the skin. The moreform is now ready to be shaped by hand, pressed into a mould, or formed around another object. The moreform becomes less pliable as it cools, but it can be softened at any time by returning it to the hot water for a few moments.

Moreform readily sticks to many other plastics when molten, though this can be avoided if required by cooling its surface briefly (e.g. splashing with cold water), while still leaving the core of the moreform pliable. Molten moreform also sticks very well to hardened moreform, which makes it ideal for projects that are to be completed in several parts. Again, this sticking can be avoided by cooling the surface, or alternatively by coating the hardened moreform with a thin film of petroleum jelly (e.g. Vaseline). Once cooled, the surface of the moreform can be coloured using permanent markers or acrylic paints. The plastic itself can also be coloured by adding food dyes to the hot water before melting the plastic. Moreform can be remoulded any number of times, simply by melting in hot water.

Tips

- Larger amounts of moreform plastic can be melted in a bowl of water in a microwave. When using a microwave to melt moreform, always make sure that the pellets are covered by water, and do not allow the water to boil
- Small amounts of moreform can be melted using a hairdryer on it's highest setting
- Working in a warm area will allow more time to shape the plastic before it begins to set.

Precautions

Do not heat moreform above approximately 65°C. It is not necessary to boil the water to melt the plastic, and moreform behaves more like an adhesive and becomes less easy to handle at higher temperatures. Never melt *moreform* using a direct flame.