

Viaxi® primer Technical Datasheet

Viaxi[®] primer cures by a highly exothermic chemical reaction between Bisphenol A/F and cycloaliphatic polyamine to a hard clear film that adheres to many different substrates. Use it with PREMARK[®], DecoMark[®] and with adhesive layer for TacPad[®]/TacGuide[®] markings on difficult substrates such as fresh concrete, cobble stones, granite etc. to give a good adhesion.

Physical data can be seen in table 1

Epoxy resin, A1	Unit	Figure	Epoxy hardener, B1	Unit	Figure
Viscosity@25°C	mPa*s	950±200	Viscosity@25°C	mPa*s	45±15
Epoxy equivalent weight	g/equivalent	193±8	H-equivalent	g/equivalent	75
Mixing ratio	g/100g resin	40	Mixing ratio	g/100g resin	40
density	g/cm ³	1.1	density	g/cm ³	≈1.0

Table 1

The mixing ratio of the 2 components is 1:2.5 that is 40 grams of hardener to 100 gram of epoxy resin.

The curing rate is dependent of:

- Air temperature
- Surface temperature

Viaxi[®] primer is a 100% solid primer so no solvents have to evaporate as it cures. This gives a curing rate that is depended of temperature only. A rule of thumb is that the curing rate doubles for every 10°C rise in temperature. Do not use Viaxi[®] primer below 10°C. Mixing volume to surface ratio is an important parameter for the pot life time. The pot life is defined as the time after mixing where the temperature has reached 50°C because of the heat generated during the exoterm reaction. A large mixing volume to surface ratio gives a shorter pot life as the heat generated cannot escape easily to the surroundings. Do not use Viaxi[®] primer after it has reached 50°C. It corresponds approximately to 50 minutes at 20°C air temperature when mixing the 3.5kg drum.

Factors that influence adhesion to substrate are:

- Surface cleanliness
- Surface moisture content
- Cohesion of substrate (inner strength)
- Surface area of substrate

Cleaning and drying of the surface are the 2 most important issues for adhesion and must never be underestimated. Sweep, burn and sweep again if necessary, to remove moss, algae's and other living organism that will come off only after preheating the surface. A substrate may contain moisture even though it looks dry. Always preheat the surface to remove any moisture and to speed up the drying rate of Viaxi® primer. Application can take place while the Viaxi® primer is still wet but it can penetrate the thermoplastic if it is heated too extensively. Inner strength of the surface is also an important issue. If Viaxi® primer is installed on a substrate with low inner strength the mechanical forces from traffic and weather acting on the thermoplastic layer, might be strong enough to tear the substrate apart. If this happens it can be seen as material is still sticking to the bottom of the thermoplastic layer.