

Use Instructions for Bostik Unigrip 999 HV Adhesive

Heat Activated High Strength Soling Adhesive

Stock Code ADBG

Guide to using Unigrip 999 HV Adhesive:

The continuing development of technology and fashion in most types of footwear has led to the introduction of numerous materials used for pre-moulded or built unit soles and these tend to differ widely in their ease of attachment to shoe uppers.

We have found that Bostik Polyurethane Adhesive Unigrip 999 HV has excellent adhesion to the majority of these materials with, in some cases, the assistance of various primer systems. The following information covers the type of upper and soling materials most commonly found, together with recommendations as to preparation, adhesive systems, and the operating conditions which are necessary to ensure good results.

Upper Materials:

1. Preparation:

- **Leather:** Roughen to remove as much of the grain layer as possible.
- **PVC:** Lightly scour if possible – otherwise carefully wipe the lasted margin with Bostik Solvent N^o.4, taking care to remove any lacquer on the PVC surface. Renew the cloth used for this operation after every 10 pairs of uppers.
- **Polyurethane Coated fabrics:** Remove the urethane coating very carefully using a soft wire or nylon brush ensuring that the roughened area lies just within the feather edge.
- **Fabrics:** No preparation is normally required but some synthetic fibre-based fabrics may need special treatment to ensure good adhesion.

2. Cementing:

For all types of upper, a generous coat of adhesive should be applied using a hand brush or by machine. For absorbent materials a second coat may be beneficial. In the case of PVC uppers, cementing should be carried out within 30 minutes of solvent wiping.

3. Open Time (drying period):

Sole attaching may be carried out after 10 minutes up to a maximum of 3 days. Where uppers are being force dried, drying times below 10 minutes are possible, but care must be taken to ensure that the adhesive does not form a skin which traps solvent and may lead to soles springing apart soon after sole attaching.

Instructions for use in PVC Injection Moulding:

Preparation and cementing are basically the same as for sole-attaching but special care must be taken to ensure complete removal of the grain layer when roughing leather uppers. The minimum drying time should preferably not be less than 45 minutes, but this can be reduced by force drying.

Again, a maximum drying time of 3 days is recommended. Certain leathers, especially if greasy, may benefit from the use of Boscodur in the adhesive.

Soling Materials:

The chart below covers the main types of soling material in widespread use at the present time:

Soling	Preparation	Primer	Active Period of Primer (Min - Max)	Cement	Open time for Heat Reactivation
PVC or PVC rubber blends	Wipe with Bostik #4 Solvent, changing the cloth after each 10 pairs	None	N/A	Unigrip 999 HV or Ultragrip 777	5-30 min to 7 days
Resin and microcell rubbers	Rough or split surface	Boscocol S	1 minute to 14 days	Unigrip 999 HV or Ultragrip 777	5-30 min to 7 days
Other rubber	Rough if necessary	Boscocol S	5 minutes to 1 month	Unigrip 999 HV or Ultragrip 777	5-30 min to 7 days
Polyurethane	Rough or double wipe with # 4 solvent, with 10 minutes between wipes. Changing the cloth after each 10 pairs	No primer may be necessary, use Boscocol S if better adhesion is required	5 minutes to 1 month – when primed	Unigrip 999 HV or Ultragrip 777	5-30 min to 7 days
Leather	Rough or split surface	None	N/A	Unigrip 999 HV or Ultragrip 777	30-60 min to 7 days
Thermoplastic Rubber (TPR)	Wipe with #3 solvent	Boscocol S	5 minutes to 1 month	Unigrip 999 HV or Ultragrip 777	2 hours to 7 days
Natural or re-constituted crepe rubber	As received or wipe with #3 solvent	Boscocol S	1 minute to 14 days	Unigrip 999 HV or Ultragrip 777	5-30 min to 7 days
Microcellular EVA	Rough or split (if there is a surface skin)	EVA primer	5 minutes to 1 month	Unigrip 999 HV, Ultragrip 777 or Neogrip 888	10-30 minutes to 7 days (except Neogrip 888, 5-30 minutes)

The following points should be noted:

- Where uppers are cemented on a track and dried for only short periods, the maximum open time on soles can be extended significantly.
- When preparing surfaces by solvent cleaning, it is essential to change the cloths as recommended to avoid redepositing silicone or plasticizer on the wiped unit.
- When using Bostik Unigrip 999 HV on leather soles, it may be necessary to apply two coats if the sole leather has an open structure.
- It is essential to ensure an activation temperature of at least 90°C on leather soling – this may mean a double period of activation if a flash activator is being used.
- The recommendations quoted for thermoplastic rubber units depend on the TR compound used and each material should be tested before use.
- It is important that the primer be applied by brush and cemented soles allowed to dry for at least 2 hours.
- A wipe prior to cementing with Bostik N^o.3 Solvent can sometimes give improved results.

Storage:

Store in cool, dry conditions out of direct sunlight, below 25°C and away from naked flame or sources of heat.

Shelf Life:

12 months if stored in cool, dry conditions in original, unopened containers.

Health and Safety:

Full details are on each product's respective Safety Data Sheets. To ensure no harm is caused to persons using Bostik products, it is recommended that the appropriate Safety Data Sheets are read by all concerned. Visit www.bostik.co.nz for copies.

First Aid:

For emergency information contact the National Poisons Information Centre, phone 0800 764 766 (0800 POISON), or CHEMCALL, phone 0800 243 622.

- **Swallowed:** Do not induce vomiting, give glass of water and contact a doctor immediately.
- **Skin:** Remove contaminated clothing, wash with warm soapy water. Do not scrub.
- **Inhaled:** Remove person to fresh air. Get medical advice if breathing becomes difficult. If inhaled to excess, remove from contaminated area – apply artificial respiration if not breathing.
- **Eyes:** Hold open and flood with water for at least 15 minutes. Get medical advice.

Disposal:

If spilt, absorb with clay, sand or earth. Collect and seal in properly labelled metal containers. Dispose of according to local authority regulations. Do not dispose of down drains or into local waterways.