

# X/162

## POLYURETHANE BASED ADHESIVE FOR BONDING UPPERS TO SOLES

**X/162** is an one-part adhesive suitable for bonding leather and plastic uppers to vulcanized SBR soles, to TR, polyurethane and PVC soles.

Characterized by high green strength and hot tack, the adhesive is resistant to leather grease, to plasticizers of PVC and to water.

It is suitable in the pre-treatment of soles for its contactability under moderate heat reactivation even after a long time from the application of the adhesive.

### CHARACTERISTICS

|                        |   |
|------------------------|---|
| <b>Composition</b>     | : polyurethane resin in a blend of organic solvents   |
| <b>Mode of setting</b> | : release of solvent  |
| <b>Colour</b>          | : opalescent to transparent   |
| <b>Solvents</b>        | : ketones   |
| <b>Components</b>      | : one-part adhesive ready to use. With the addition of 2-3% <b>Desmodur RE</b> or <b>RFE</b> to improve the adhesive performance on to soles (e.g. polyurethane soles and plastic uppers) |
| <b>Pot life</b>        | : 4 hours with the addition of Accelerator  |

### TECHNICAL DATA

|                       |   |
|-----------------------|---|
| <b>Solids content</b> | : 17-18 %   |
| <b>Viscosity</b>      | : 2200-2500 mPa.s (Brookfield spindle 4 spd 50 at 25°C) |

Values valid for product supply specification upon leaving the factory

### METHOD OF USE

#### Preparation of the surfaces:

- Leather uppers and leather soles: after roughing, apply a first coat of **Primer 144 F** or **Primer C** in addition with 3% of **Desmodur RE** or **RFE**. **Primer C** is particular suitable for bonding leathers with high grease content.
- Polyurethane soles : solvent wipe with **ST/141** or rough.
- PVC soles: solvent wipe with **ST/141**.
- Vulcanized rubber soles: treat with **Primer AC/20** or **AC23/M**, if the surface is contaminated by release agents it is recommended to solvent wipe with **ST/141** or to rough first.
- TR rubber soles: treat with **Primer AC/20** or **AC23/M**
- Plastic uppers: in case of PVC uppers solvent wipe with **ST/141**. In case of PU coated materials. check if any anti-adhesive finish was applied to the surface and remove it by solvent wipe using **ST/141**

**Application:** apply a coat of adhesive on to both surfaces to be bonded. If a first coat is required on to leather materials, this is to be applied some 5-10 minutes prior to applying the second coat.

**Drying of adhesive:** allow to dry 20-30 minutes so that the solvents can evaporate, then heat activate at a temperature in the range 60°C-70°C.

## Technical Data Sheet

### XM/162

**Assembly:** bring the two parts into contact and apply pressure of 4-5 bars with 10-12 seconds dwell time. Bond strength gradually increases with time, reaching maximum value in 2 or 3 days after bonding.

#### **PRE-CEMENTING**

For its good contactability under moderate heat reactivation even after a long time from the application, the adhesive is particular suitable for pre-cementing soles ready for the final assembly.

#### **Preparation of the soles**

-PVC soles: solvent wipe with **ST/141 Solvent**, after 5' apply a coat of one-part **X 162** adhesive by brush or automatic machine.

-Vulcanized rubber and TR soles: pre-treat the soles with **Primer AC/20** or **AC/23 M**. After at least 45' apply a first coat of one-part **X/162** adhesive by brush or automatic machine. On vulcanized rubber soles it is recommended to solvent wipe or to rough before the halogenating treatment to remove possible release substances.

**Storage and use:** the soles sheltered from dust or polluting substances, can be bonded to uppers (prepared as described) even after 2 or 3 weeks from the application of the adhesive.

**Heat activation and pressing:** activation temperature of the parts to be bonded is 60°-70°C, pressure is 4-5 bar and pressing time 10-12 sec..

#### **Note:**

Especially on to sole made from materials sensible to solvents, like PVC or TR, the pre-application of the adhesive improves the green strength and avoids the formation of "threads" after pressing the parts.

**Thinner:** **ST/121**.

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#### **STORAGE STABILITY**

12 months in the original sealed pack stored in a dry place at a temperature range +5°C+25°C.

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