

STEINDL GLAS GmbH

c/o Herr Rangger Gries 303 A-6361 ITTER A-5351 Aigen-Voglhub: Erzeugung von Dichtstoffen

A-4823 Steeg: Büro/PU-Erzeugung/Kreidewerk Tel. +43 / (0) 6135/8205 - 0 Fax +43 / (0) 6135/8323

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## Dear Herr Rangger,

With reference to your conversation with Herr Siller regarding the adhesion tests on SIGNAPUR, we can confirm that our products Alkoxy 130 and Neutral 120 demonstrate excellent bonding characteristics on the latter.

## Regarding the method of testing:

Currently, the adhesion test for sealing compounds is undertaken on an extremely wide range of base materials using the peel and bead test. I.e. sealing beads are applied from the cartridge direct on to the base material to be tested. Width approx. 10mm, height 3-5 mm.

These RTV-1 beads are then cured at room temperature (duration 14 days).

When vulcanisation has taken place, the end of a bead is cut with a knife in such a way that the blade separates the sealing compound from the base material. Then the elastomer is drawn up so that it is perpendicular to the base material.

If the sealing compound tears within itself and remains 100% bonded to the base material, this is referred to as a cohesive failure and 100% adhesion.

If the strand detaches itself from the base material either partially or entirely, an adhesive failure is present. The vulcanised material has bonded poorly with the base material or not at all.



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As the action of water generally makes the adhesion pattern of fully cured compounds worse, the following test is usually performed:

- A: 14 days storage at room temperature, followed by assessment of the failure pattern
- B A + 14 days storage in water at room temperature, followed by assessment of the failure pattern
- C. A + 28 days storage in water at room temperature, followed by assessment of the failure pattern

In all these tests, our product ALKOXY 130 and NEUTRAL 120 demonstrated excellent bonding characteristics on the sample of SIGNAPUR received from you.

We hope to have been of assistance to you with these comments and remain,

Yours sincerely, J. RAMSAUER KG

Werner Siller