



TECHNICAL BULLETIN – TB179

SOLVENT GROUT SEALERS AND RUBBERISED TILE ADHESIVES

JULY 2024

INTRODUCTION & SCOPE

Over the last few years, the grout market has seen the increasing use of grout sealers, ostensibly increasing water resistance, aiding cleaning, and increasing colour intensity. The types of sealers used are predominantly water-based products, but there are also solvent-based versions. This technical bulletin discusses an effect that has been observed where solvent-based sealers have been applied onto grout, which overlies rubber-modified tile adhesives (using black rubber crumb).

THE ISSUE

Ardex has observed dark discolouration occurring on grout treated with some solvent-based grout sealers, where the underlying adhesive used to bond the tiles was a rubber-modified flexible adhesive. These observations were made in the field on job sites, and some laboratory examination of sealer applied onto samples of rubber-modified adhesive has shown that the discolouration appears to arise from the solvent attack of the crumb rubber.

The solvents used are predominantly 'aromatics', the most common being Xylene (CAS No. 1330-20-7, UN Number 1307). This class of solvents is very effective in extracting oils, light fractions and colourants from rubber and then mobilising them. Recycled rubber from car tyres is more subject to leaching than first-use synthetic rubber. A major advantage of solvent-based sealers is their superior penetration ability into the grout, but this means that the solvents can also affect the underlying adhesive bed, leaching out the staining materials.

SUGGESTIONS

Where a rubber-modified adhesive has been used to bond the tiles and a solvent-based grout sealer is to be applied, it would be prudent to install either test areas to check for discolouration or apply the sealer to a section of the adhesive to check for solvent attack on the adhesive components.

Once the grout has been stained, it cannot be cleaned or decolourised, and it is necessary to either replace the grout or potentially apply an epoxy-based grout colourant.

IMPORTANT

This Technical Bulletin provides guideline information only and is not intended to be interpreted as a general specification for the application/installation of the products described. Since each project potentially differs in exposure/condition, specific recommendations may vary from the information contained herein. For recommendations for specific applications/installations, contact your nearest Ardex Australia Office.

DISCLAIMER

The information presented in this Technical Bulletin is to the best of our knowledge true and accurate. No warranty is implied or given as to its completeness or accuracy in describing the performance or suitability of a product for a particular application. Users are asked to check that the literature in their possession is the latest issue.

REASON FOR REVISION-ISSUER

Content review, change of company slogan and address

DOCUMENT REVIEW REQUIRED

24 months or whenever third-party suppliers change their recommendations.

Australia: 1300 788 780

New Zealand: 643 384 3029

Web: www.ardexaustralia.com

email: technical.services@ardexaustralia.com

Address: 2 Buda Way, Kemps Creek NSW 2178