

**PENTAMIX APL**  
and  
**PENTAMIX APL 14**

# The problem of surface film

In the use of tile adhesives, a film on the kerbs is created, which reduces the contact surface between the cement/adhesive and the tile.

Because of this, strength resistances are lower and can cause cracks and fissures, up until the detachment of the tile.

In order to reach the standards for C1 and C2 classes, it would be necessary to undertake expensive choices, which could make the product anti-economic.

# Why does the film create?

There are many causes for the development of the film:

- Exothermic reaction of the cement (especially if the cement is combined with accelerating products).
- Aggregates too thin in the mixture (they absorb more water).
- Choice of the kind and the quantity of the polymer (weather affects the behavior of the polymers).

# The solution of Pentachem

In order to solve the problem of the quick development of the film in tile adhesive, Pentachem developed the series of the **Pentamix APL**, composed by **Pentamix APL** and **Pentamix APL 14**.

The two products work on the development and on the features of the film, as well as on the characteristics of the binders responsible for their creation.

Thanks to their composition, **Pentamix APL** and **Pentamix APL 14** lengthen the formation time of the film and reduce its thickness. Thus, the contact surface between the adhesive/tile and the cement increases, and the cement can develop stronger resistances.

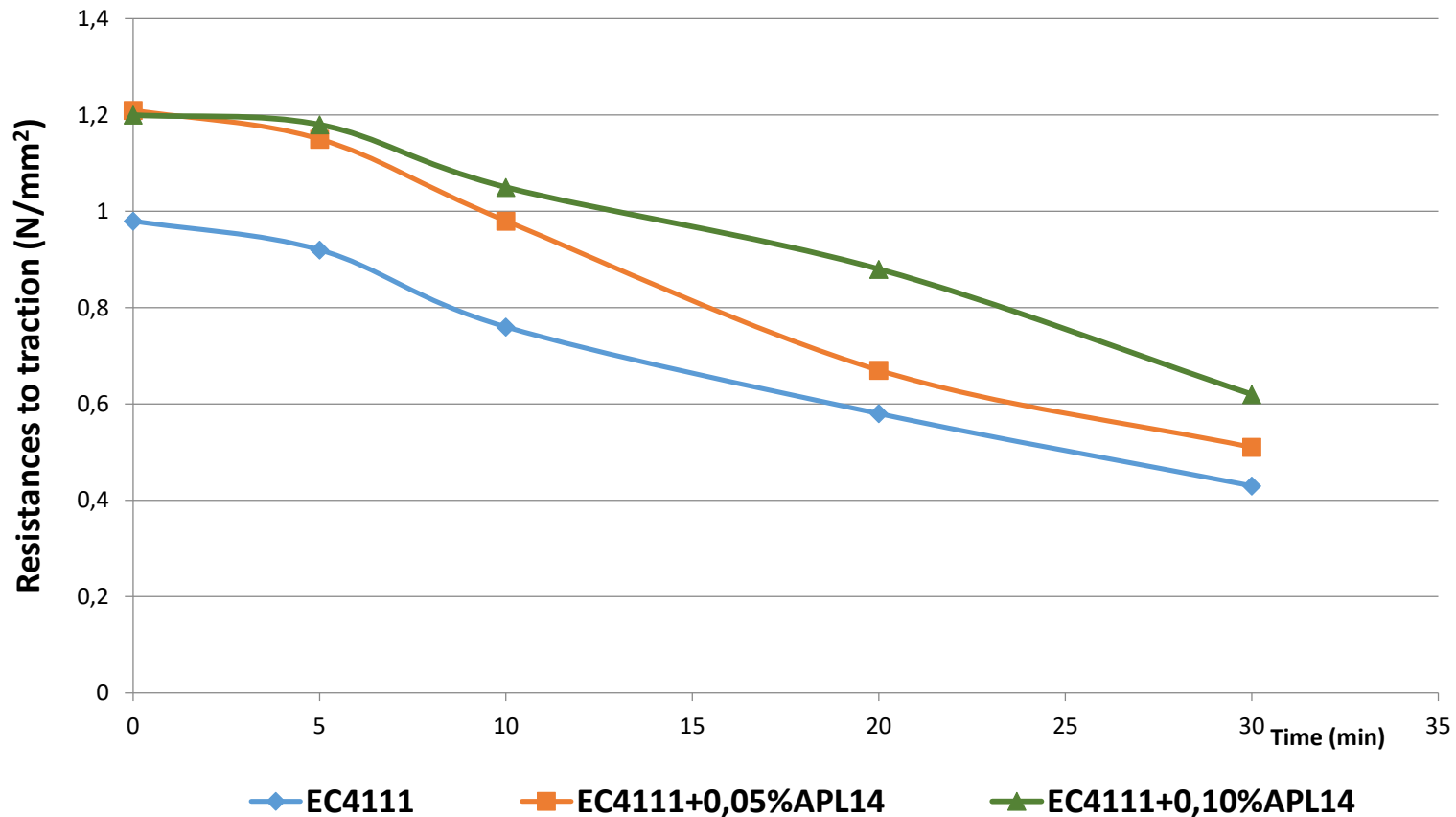
## Differences between Pentamix APL and APL 14

Both Pentamix APL and Pentamix APL 14 act on the development and on the consistency of the surface film of tile adhesives.

Pentamix APL lengthens the filming time of the cement, especially in C1 adhesives.

Pentamix APL 14, on the other hand, is more appropriate in the formulations of C2 adhesives, especially for classes C2F (fast setting), C2E (extended open time), and for C2S1 and C2S2 (high deformability).

## Effects of Pentamix APL 14 on the resistances to traction in a tile adhesive formulated with Penta EC 4111













# Other applications

As well as in tile adhesives, Pentamix APL and **APL 14** can be used also in other product to increase their performances.

**Self-levelling screeds:** Pentamix APL and Pentamix APL 14 can be employed to better homogenize different layers.

**Repairing mortars:** Pentamix APL 14 can also be used in quick repairing mortars to increase the thixotropy.

# Choose the right Pentamix APL

	Pentamix APL	Pentamix APL 14
High environ. temperature		
Polymers non optimised		
Quick binders		
Aggregates too thin		
Unbalanced aggregates		
Low water retention		
High content in polymers		



**Thank for your  
attention**