

# Starvis® stabilizers

High-performance stabilizers for flowable dry mortar applications

## What are Starvis® stabilizers?

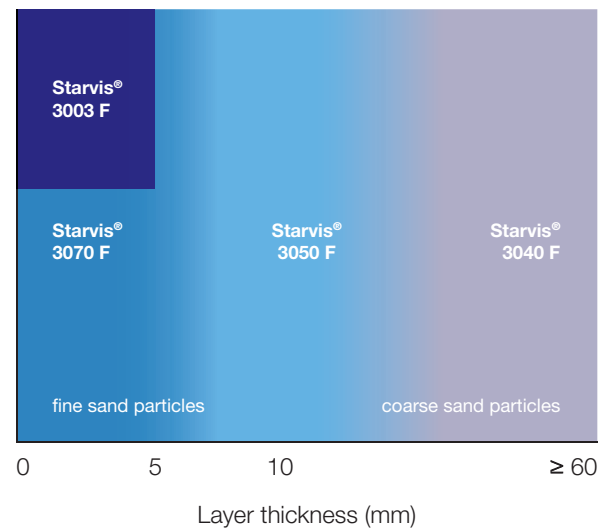
Starvis® 3003 F, 3070 F, 3050 F and 3040 F are stabilizers in powder form based on water soluble high molecular weight polymers that prevent bleeding and segregation of mineral particles and aggregates.

- ▶ **Starvis® 3003 F** is optimized for self-levelling underlayments (SLUs) with fine particles and very low layer thickness, providing unique self-healing and self-levelling properties and high water retention for hand application.
- ▶ **Starvis® 3070 F** is a quickly dissolving stabilizer for SLUs with thin to medium layer thickness for mixing pump and hand application.
- ▶ **Starvis® 3050 F** is a quickly dissolving stabilizer for SLUs with thin to medium layer thickness. It provides good self-healing properties, shear thinning rheology, a high temperature robustness and very smooth surfaces.
- ▶ **Starvis® 3040 F** is a stabilizer for SLUs and flowing floor screeds with coarse particles and medium to high layer thickness, providing strong shear thinning rheology which reduces pumping pressure.

Hand applied

Mixing time

Machine applied

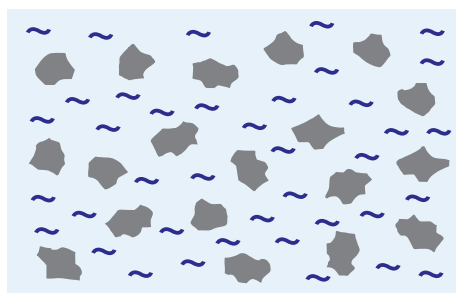


## Unique stabilization of fine and coarse sand particles with Starvis®

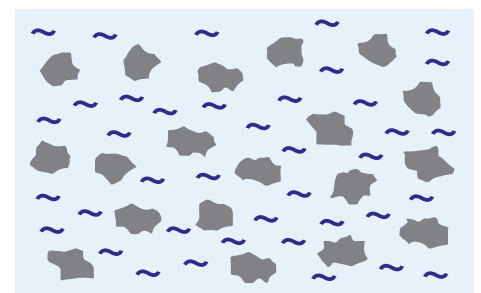
### Thin layer SLU

#### stabilized with Starvis® 3003 F

Efficient stabilization of fine particles by plastic viscosity without influencing yield point (excellent self-healing properties).



at rest

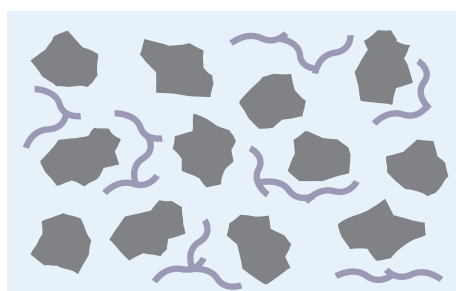


in movement

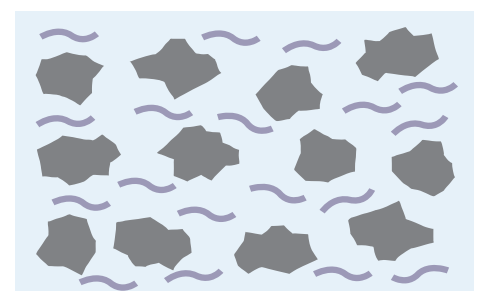
### Thick layer SLU or flowing floor screed

#### stabilized with Starvis® 3040 F

Efficient stabilization of coarse sand particles due to intermolecular interaction of Starvis® molecules.



at rest

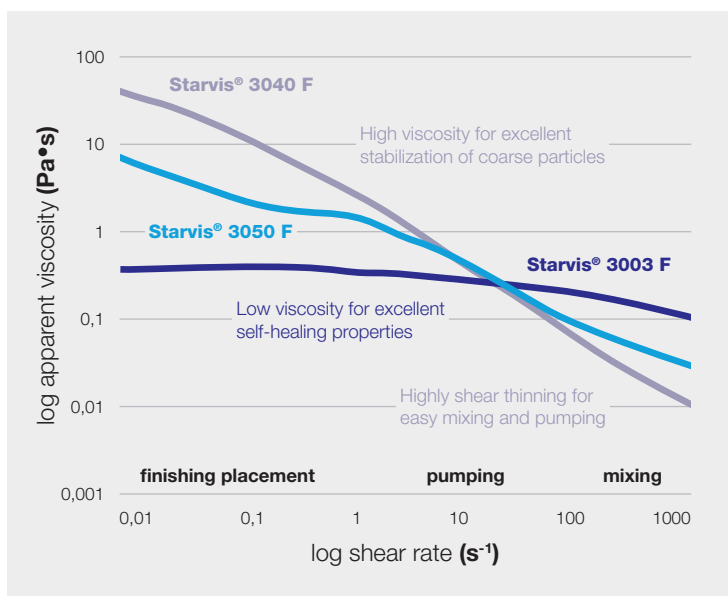


in movement

## Technical Recommendations

Dosage recommendation for all Starvis® stabilizers: 0.05 to 0.30 % (by weight of dry mortar)

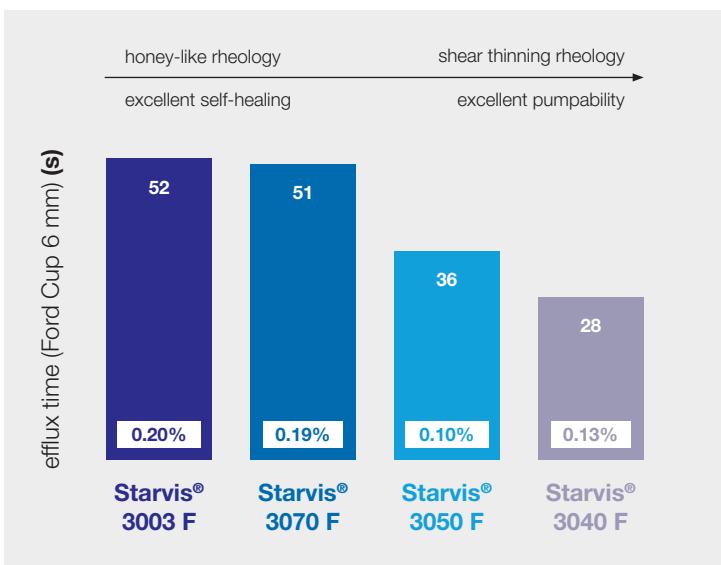
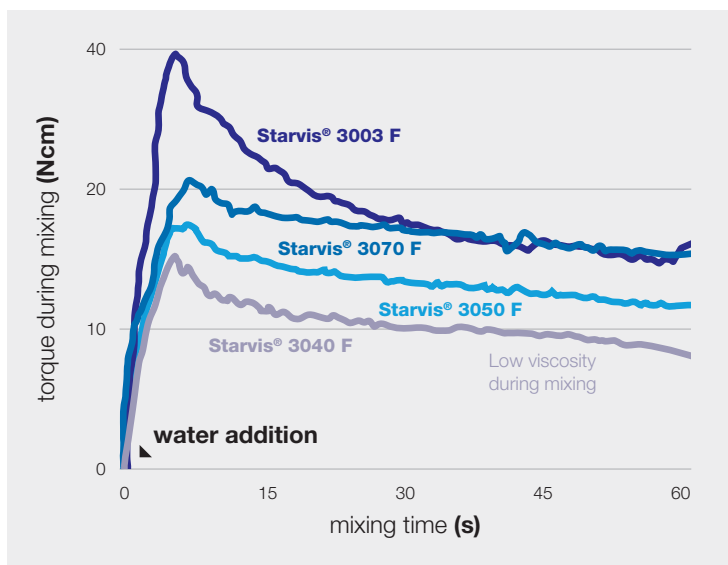
### Rheological profile of Starvis® types in aqueous salt solution



Features	Benefits
Low viscosity at low shear rate <b>(Starvis® 3003 F and 3070 F)</b>	▶ Excellent self-healing properties
High viscosity at low shear rates and fast restructuring after shearing <b>(Starvis® 3040 F and 3050 F)</b>	▶ Excellent stabilization of fine and coarse filler particles after placement
Highly shear thinning <b>(Starvis® 3040 F)</b>	▶ Easy mixing and pumping ▶ Fast flow speed ▶ Allows good flow and levelling during movement

### Mixing and pumping behaviour of SLU with different Starvis® types

Starvis® 3070 F and in particular Starvis® 3050 F and Starvis® 3040 F provide low mixing resistance in screw mixing pumps. Starvis® 3040 F and Starvis® 3050 F provide faster flow speed compared to Starvis® 3070 F and Starvis® 3003 F.



**Further information (test formulations and further test results) is available on demand. Please feel free to contact our local sales representatives.**

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