

TEK-SIL A.F

Sealing and Bonding

Good Description:

TEK-SIL AF is a one-component, moisture-cured silicone sealant which contains a fungicide. It cures at room temperature to form a flexible, medium modulus watertight joint for general sanitary sealing.

Application:

TEK-SIL AF can be used on all weatherproofing or bonding applications where protection against fungal growth sought, such as jointing baths, sinks, showers, kitchen furniture, ceramic tiles, plumbing fixtures or cold rooms.

Advantages:

TEK-SIL AF has been specifically formulated as a sanitary sealant for use in hot humid environments such as kitchens and bathrooms where resistance to fungal growth is necessary.

TEK-FLEX AF is easily extruded and its rapid curing characteristics enable units to be quickly sealed and put into service. Its smooth, glossy appearance compliments glazed sanitary ware and ceramic tiles.

TEK-SIL AF adheres without primer to glass, ceramic, vitreous, surfaces, painted surfaces and anodized aluminium. It offers good resistance to most common cleaning products.

Characteristics:

1. Before curing

Type of sealant	Acetic
Specific gravity (non cured), approx.	0.97
Flow resistance* (EN 27390), mm, approx.	1
Extrusion, g/min (standard NM 495A 3mm/3 bars), approx.	110
Viscosity (strain 3000 N/m ² , 20°C), Pa.s, approx.	80

2. Curing:

Skin formation time*, min. approx.	9
Tack-free time*. min. approx.	20
Curing rate*, mm / 1 day, approx.	3
mm/3 day, approx.	6.5
mm / 7 days, approx.	10
Application temperature, °C	+ 5 to + 40

3. After curing:

Shore A hardness (ISO 868), approx.	20
Elastic recovery (EN 27389), %, approx.	95
Joint movement capability, %	15
Operating temperature, °C,	-30 to + 120

Mechanical properties on a 2 mm thick film (NF T 46002)*:

Modulus at 100% elongation, MPa, approx.	0.5
Tensile strength, MPa, approx.	2.0
Elongation at break, % approx.	450

Mechanical properties on slabs (EN 28339)*:

Modulus at 100% elongation, MPa, approx.	0.4
Tensile strength, MPa, approx.	0.8
Elongation at break, %, approx.	180

* at a temperature of 23°C and relative humidity of 50%

Standards:

The fungicide activity has been tested according to ISO 846. TEK-SIL AF meets ISO 11600-F-12,5 E standard.

Processing:

Joint preparation:

The joint faces to be bonded must be clean, dry and free from dust, oil, grease, old sealant and any traces of contaminant which may affect adhesion. Surfaces should be degreased with solvent soaked cloth and then wiped with a clean cloth. To remove dust, use oil-free compressed air.

Priming:

Although TEK-SIL AF will bond well to most clean and dry surfaces, it is recommended that a primer be used on certain substrates in order to ensure a strong and uniform bond.

On non-porous substrates, the primer should be applied with a cloth or soft brush in a thin and uniform film. On porous substrates apply with a brush; in the case of particularly porous material apply a second layer after drying.

Joint dimensions:

The movement capability of sealant as well as local regulations must be considered.

Sealant application:

For good performance it is essential that the sealant be only bonded to the two facing sides of the joint; to achieve this, install a backup material (closed cell polyethylene or open cell polyurethane foam). Apply the sealant in a continuous operations, making sure that all air pockets or voids are eliminated. Tool the sealant with light pressure to spread the material against the joint surfaces. This operation should be made with a dry spatula before skin formation occurs. Excess uncured sealant should be wiped and cleaned with a commercial solvent. Cured sealant can only be removed by scraping or with a special silicone remover product.

Limits of use:

TEK-SIL AF must not be used on sensitive surfaces which could react with acetic acid which is released during cure, nor should it be used on materials where migration of constituents can take place e.g. certain rubbers. TEK-SIL AF is not recommended where abrasion or physical abuse will be encountered. For all uses in permanent immersion, please consult us.

Colours:

Translucent, White.

Packaging:

TEK-SIL AF is available in 280 ml, 300 ml or 310 ml cartridges and 400 ml and 600 ml aluminum sausages.

Storage and shelf-life:

TEK-SIL AF has a shelf life of 12 months, when stored at a temperature between -5°C to $+50^{\circ}\text{C}$ in its original unopened packaging.

Safety:

Consult the Safety Data Sheet of TEK-SIL AF.