

Technical Data Sheet Fixology FCS

Product Description:

An elastic, paste-like and stable single component silicone sealant for the sealing of joints in glass and window construction applications. Fixology FCS may also be used for the sealing of connecting and expansion joints and for sanitary applications.

Properties:

Fixology FCS is a chemically neutral oxime system that reacts with air moisture; it remains permanently elastic, has fungicidal capacities and is paint compatible, non-ageing, weatherproof and UV-resistant. Fixology FCS is highly strain-resistant (in accordance with DIN regulation 18545, part 2, group E), abrasion-resistant, paint-compatible (in accordance with DIN regulation 52452, part 4) and suitable for use on laminated safety glass.

Areas of Application:

Fixology FCS may be used for the sealing of glass on windows with wooden, metal or plastic/ PVCu frames. Wood must be varnished or glazed; although use of a primer on varnished or glazed wood is usually not required, please carry out preliminary tests. Fixology FCS Application Technology department offers adhesion and compatibility test services. Fixology FCS may also be used for the sealing of connecting joints, Profilit[™] glazing, other expansion joints, as well as for the bonding and sealing of joints in the fields of metal, plastic, apparatus engineering and shipbuilding applications. Fixology FCS may not be used for the assembly of aquaria and for work with marble or natural stone.

Preparation of Adhesive Surfaces:

All adhesive surfaces must be capable of bearing loads, dry, free of grease and dust, and have a temperature of at least +5°C. Non-porous surfaces should be cleaned with a cleaner. If necessary, use a primer; please follow the primer table. On porous surfaces, Fixology FCS achieves sound adhesion if the surfaces are capable of bearing loads; to achieve maximum adhesion, Primer may be required. Plaster residue, dust, sand and rust must be removed mechanically. Surfaces containing bitumen or giving off softening agents are unsiutable for use as adhesive surfaces. Use on high-fired ceramics and enamel creates a danger of staining.

Joint Formation:

When sealing glass constructions, dimension the joints in accordance with the regulations provided by the IFT Rosenheim (09/1983).



Line all other joints with Backing Material so that joint depth dimensioning amounts to $\frac{2}{3}$ of the joint width (analogous to DIN regulation 18540). In doing so, make sure that joint dimensions do not fall below 10 mm, and do not exceed 25 mm. Joints that do not allow for the inserting of backing material due to limited depth should be fitted with pre-formed tape or polyethylene film to avoid triple-surface adhesion.

Backing materials must be compatible with Fixology FCS (in accordance with DIN regulation EN 26927). Materials containing oil, tar, or bitumen, or based on natural rubber, chloroprene, neoprene or EPDM rubber are unsuitable for use as backing material.

Application:

Employ a hand operated, battery operated or air pressure dispensing gun to inject Fixology FCS into joints; take care to avoid air bubbles. Then smooth joints (prior to the formation of a permanent skin) with the help of a trowel and a surface finishing agent. Remove excess surface finishing agent immediately after application.

Technical Data:

Application temperature		-10℃ to +40℃
Skin formation time	(23℃/50%)	15-20 min
Cure rate		3 mm/day
Density		1.04 g/ml
Shore A hardness	(DIN reg. 53505)	approx. 20
E modulus 100%	(DIN reg. 52455)	0.37 N/mm²
Max. tensile strength	(DIN reg. 52455)	0.5 N/mm²
Elongation at break	(DIN reg. 52455)	>250%
Permissible movement tolerance		25%
Service temperature / stability		-50℃ to +180°

Note:

Similar to all silicone-based systems interacting with oximes, Fixology FCS may cause the yellowish discolouration of certain varnishes (e.g. alkyd resins) or sealants. For that reason, please take care that freshly sealed windows are stacked apart so that sufficient air circulation is ensured.

Cleaning:

Freshly applied silicone sealant can be removed with cleaner. Fully cured materials can only be removed mechanically.

Storage:

In cool and dry environments, Fixology FCS can be stored for at least 18 months.

Safety Instructions:

See EU Material Safety Data Sheet.

Important Notice:

The information contained herein has been compiled to the best of Fixology knowledge; nonetheless, these instructions should be regarded as non-binding. They do not release users from the obligation to test the planned procedures and purposes for applicability with regard to the use of the material described herein. Earlier versions are hereby rendered invalid. Generally, our standard business conditions apply. *July 2005*