

Technical data sheet: ESS SEAL ESS1 Original ver.date: 2017-04-10 Rev. date: 2021-10-07

ESS SEAL ESS1

Allround sealant

Description:

Elastic sealant based on hybrid polymer technology. For most indoor and outdoor applications. Free from silicone, isocyanates, phthalates and solvents. ESS SEAL ESS1 is approved for applications in food-related environments.

Applications:

For most applications such as window sealing, flooring and facade. As the product has very good mold-repellent properties, it can also be used in wet rooms / bathrooms. Adheres to most materials such as. concrete, stone, cellular plastic, ceramics, metal and wood. If used on wet concrete a suitable primer must be used. The product can be used for less demanding adhesive applications.

Technical data:

Туре	Hybrid polymer	
Curing System	Moisture activated	
Consistency (DIN EN ISO 7390)	<u><</u> 3 mm	
Density [g/cm ³]	1,38 ± 0,05	
Colour	White	RAL 9010
	Light grey	RAL 7035
	Dark grey	RAL 7042
	Antracit	RAL 7016
	Black	RAL 9011
	Semitransparent	
Packaging [ml]	300/600	
Paintabile*	Yes	
Skin time/open time [min]	20-30 min	
Hardness (DIN 53505) [Shore A]	32	
E-modulus (DIN 53504 S2)	0,6	
[N/mm ²]		
Elongation at break (DIN 53504	~600 (~300 for semitransparent)	
S2) [%]		
Tensile strength (DIN 53504 S2)	1,6 (2,3 for semitransparent)	
[N/mm ²]		. ,
Movement capability [%]	± 20	
Elastic recovery at 100 %	> 60	
elongation (DIN EN ISO7389) [%]		
Curing time [mm/24h]	2,5 (2,0 for semitransparent)	



Loss of volume (DIN ISO 10563)	≤ 3 (≤ 4 för semitransparent)	
[%]		
working temp [°C]	5-40	
Application temp, continuous [°C]	-40 till +90 (+80 for semitransparent)	
Shelf life cool & dry [months]**	12	
Storage temperature [°C]	5 – 20	

All values at 23 ° / 50 % RH, unless otherwise indicated

* Paintable only given as yes or no in the table. ESSVE always recommends testing before fullscale implementation. Always observe that all product combinations have not been pretested and therefore it is always up to the customer/end-user to check that the paint, varnish or other surface finish is compatible with the product in question. In the case of products containing solvent it is always recommended that barrier primer is used. For MS/Hybrid products, caution should be exercised in the use of Oil-based (alkyd) surface finishes - greatly extended drying times may come into question. Painting over is generally never recommended for all elastic and flexible products. Varnish and paint are rarely elastic and usually crack, in rare cases this can also cause cracks in the underlying joints (joint & adhesive). For MS/Hybrid polymer the best result is achieved when painting over wet on wet within 4 hours after application, after cleaning with acetone all MS can be painted over at any time after curing.

** Best before labelled packaging, for products with bag in box an unopened bag applies.

Meets the standards:

EMICODE EC1Plus R

Instruction/Application:

Ambient and material temp + 5 ° C \div + 40 ° C, best results are obtained at +20 ° C. The cartridge should be at room temperature. Make sure that the substrates to be joined are clean, free of dust and loose particles as well as dry and grease / oil free. If necessary, clean thoroughly, use alcohol, acetone or another suitable quick-evaporating agent that leaves no residue. Naphtha can cause oily skin which can cause adhesion problems. High humidity in concrete and wood impairs adhesion. The joint is bottomed with ex. ESSVE backer rod at the correct depth. To avoid damage to the backer rod, mount it with a blunt and smooth tool.

Chemical resistance:

Good: Water, salt water, aliphatic solvents, oil, grease, diluted inorganic acids and bases (alkali) **Moderate**: Esters, Ketones, aromatic hydrocarbons **Not resistant**: concentrated acids and chlorinated hydrocarbons

Weatherproof with good UV-resistance



Cleaning:

Uncured adhesive could preferably be removed with ESSVE RENGÖRINGSDUKAR but acetone or alcohol can also be used, cured adhesive can only be removed mechanically.

Storage:

ESS SEAL ESS1 is best stored in dark, cool and dry conditions. The product can withstand low temperatures, but should not be exposed to freezing temperatures for long periods.

Safety:

See separate safety data sheet

Notes:

All information in this document is given in accordance with known facts and information at the time of writing. The information is subject to change without further notification. The document is updated continuously in conjunction with regular revision or in the event of majorspecific technical changes

All advice given by ESSVE should only be seen as indicative and does not mean that ESSVE can be held responsible for the advice provided. It is always the customer's responsibility, at his/her own risk, to decide on the choice of product, usage, applications, etc. The Supplier's advice is only a part of the customer's decision making data.