

ESS TACK PRO1

High-viscosity 1-component Contact Adhesive with direct load carrying capability

Product Description:

ESS TACK PRO1 contact adhesive with direct load-carrying capability - grips before curing. ESS TACK PRO1 is very strong, fast curing, flexible and free from solvents, isocyanates, phthalates and silicone. Product is anti-mould treated and completely weatherproof. ESS TACK PRO1 will not damage other materials, and has good chemical and temperature resistance.

Areas of application:

Replaces nails, screws, rivets, etc. For use both indoors and outdoors, in construction and industrial sectors. In applications of steel, metal, aluminium, wood, laminate, cork, plastic*, concrete, stone, plaster, ceramics, wood panelling, skirting, panels, signs, insulating and acoustic panels, trim strips, wall linings, thresholds, insulation material, polystyrene, tiles, natural stone, window sills, shower cabins, toilets, etc. Also suitable for elastic bonding in metal, equipment and machine industries, plastic* and electrical engineering, ventilation and air conditioning technology, car bodies, vehicle, trailer, container and automobile manufacturing.

In all situations with a need of rapid fixing and a strong result. In applications where you want a filling, completely weatherproof adhesive. Remains flexible, never solidifies totally - takes up impact, shock and vibration, which makes it well suited for e.g. vehicle and marine applications. Perfect for more difficult applications where you do not want to assemble using a mechanical fastening method e.g. mirror adhesive, concealed assembly, overhead assembly, etc.

* Not PP, PE and PTFE

Technical data:

Type	MS Hybrid polymer
Curing system	Moisture-curing
Consistency	Paste like, viscous
Density [g/cm ³]	1.41 ± 0.05
Colour	White
Package [ml]	290
Paintable*	Yes
Skin forming/open time [min]	≤ 8
Hardness (DIN 53505) [Shore A]	58
E modulus (DIN 53504 S2) [N/mm ²]	≥ 1.3
Ultimate elongation (DIN 53504 S2) [%]	≥ 300
Ultimate tensile strength (DIN 53504 S2) [N/mm ²]	≥ 2.7

Curing time [mm/24h]	3
Volume change (DIN 52451) [%]	≤ 8
Application temp [°C]	5-40
Application temp, constant [°C]	-40 till +90
Application temp, short time exp. [°C]	+200 (max 10 min)
Life in cool & dry [months]**	15
Storage temp, ideal [°C]	5-20
Freeze sensitive	No, can handle brief storage in cold

All values are at 23° / 50% H.R., unless otherwise indicated

** Paintable only given as yes or no in the table. ESSVE always recommends testing before full-scale 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.*

Approval:



ESS TACK PRO1 is registered in the BASTA register. BASTA registration means that we can prove that this product is in compliance with BASTA criteria concerning environmental and health properties. See www.bastaonline.se.

Do this/application:

Follow the instructions on the package. Temperature during application +5°C ÷ +40°C, the best results are obtained at +20 °C. The product can be applied and used even in freezing conditions as it cannot freeze, curing times are however always considerably longer at lower temperatures and can, at temperatures below 0°C, take several weeks, you should always consider the risk of condensation and frost on the application surfaces at lower application temperatures. The cartridge should have a temperature equivalent to normal room temperature, but can be heated slightly for higher extrusion rate. At lower temperatures the product may be perceived as slow and difficult to get out of the tube. ESSVE recommends the ESS TACK cartridge nozzle, part no: 19940, and the cartridge gun TACK GUN, part no: 19602, for the best results. Apply in strips or dots, not for full surface coverage.

For maximum adhesion, the surfaces must be clean from dust, loose particles, oil, grease and other contaminating materials before applying the adhesive.

ESS TACK PRO1 usually attaches on damp or not completely clean surfaces and even cures under water.

It is recommended to use primer, V21 for absorbent materials and V2 for non absorbent materials for applications with large temperature fluctuations, or e.g. hard surfaces that may affect adhesion in the application.

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

Completely weatherproof

Process and loadability

The product can, if necessary, be exposed briefly to temperatures up to approx. 200°C (e.g. during powder coating) or other sequential brief heat treatment. The product should not be exposed to high temperatures for more than about 15 minutes as after this a pyrolytic degradation of the polymer starts. Where necessary to load or move the given application, this should be done at the earliest after about 8 hours, in a normal room environment (NTP).

Cleaning:

Uncured adhesive is cleaned using acetone or alcohol, cured adhesive only mechanically.

Storage:

ESS TACK PRO1 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 instructions:

See the separate Safety Datasheet

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 major-specific technical changes.



Technical data sheet ESS TACK PRO1

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Rev. Date:

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.