

DYLATAN

EXPANSION JOINT PUTTY ONE-COMPONENT SEALANT BASED ON POLYURETHANE

DESCRIPTION

Expansion joint putty is a single-component, polyurethane sealant with a thick consistency. After application, it reacts with atmospheric moisture and cures to a solid elastic mass that adheres and seals perfectly and is resistant to ageing processes and weather conditions. For use indoors and outdoors, in construction in food storage facilities, cold stores, freezers and food processing plants without direct contact with water intended for human consumption.

Compliant with: EN 15651/1 TYP F INT / EXT; EN 15651/4 TYP PW INT / EXT

Compliant with: ISO 11600 Type F Class 25 Subclass HM

ADVANTAGES

- Permanently elastic over a wide temperature range, movement in joint $\pm 25\%$
- Stable, does not shrink
- Does not collect dirt
- Easy to apply with suitable tools
- Excellent adhesion to metal, plastics and other building materials
- Does not leave stains
- Vibration and sound dampening properties
- Due to its elasticity, it allows balanced stress transfer
- Resistant to ageing processes, weathering, seawater, lime water
- Can be painted with water-based/solvent-based paints (pre-testing recommended)

AREAS OF APPLICATION

- Sealing and bonding of different materials
- Flexible bonds between metal, plastic, glass and other materials
- Replaces rivets and other mechanical fasteners
- Sealing of vertical and horizontal joints
- Weather-resistant bonds between masonry, concrete blocks, wood, concrete, metal frames
- Metal roofing and guttering

TECHNICAL DATA

Consistency	<i>Paste</i>
Colour	<i>White, grey, black (beige and brown on request)</i>
Chemical base	<i>polyurethane</i>
Curing system	<i>Reaction to atmospheric moisture</i>
Speed of cure [mm]	<i>approx. 2,3 (1 day in 23°C with 50% relative humidity)</i>
Shore A	<i>approx. 35 (23°C and 50% o.p.; DIN 53505)</i>
Density [g/cm³]	<i>approx. 1,32 (23°C and 50% o.p.)</i>
Time of epidermis formation [min]	<i>approx. 50 (23°C and 50% o.p.)</i>
Elasticity at 100% [mm²]	<i>approx. 0,7 (ISO 37 DIN 53504)</i>
Tensile strength	<i>approx. 1,7 [N/mm²] (ISO 37 DIN 53504)</i>
Extension [%]	<i>approx. 500 (ISO 37 DIN 53504)</i>
Movement capability in the weld	<i>±25% of a weld width</i>
Temperature of application [°C]	<i>from +5 to +40</i>
Temperature resistance [°C]	<i>-40 / +90, short period of time to 120</i>

APPLICATION

Surface preparation

A preliminary adhesion assessment should be carried out before application. To achieve optimum adhesion results, cleaning agents and/or primers may be required. Without exception, the substrate must be prepared according to the instructions. Surfaces must be clean, dry, free of water, oil, grease or rust. Remove all loose particles or residues with a compressed air jet, sandpaper or a hard brush. Glass, metal and other non-porous surfaces must be free of any paint coating and cleaned with a solvent. Finished panels that are treated with release products other than polyethylene film must be sandblasted or mechanically sanded and free from dust. Pierce the protective membrane at the front of the thread. Screw on the plastic nozzle and cut it at the correct angle to gain the desired thickness. Insert the cartridge or film into a hand-held or pneumatic gun (fitted with a telescopic plunger) and apply the adhesive/sealant. Careful application prevents air bubbles. Once opened, the packaging should be used within a relatively short period of time. The optimum application temperature for both substrate and sealant is between 15°C and 25°C.

RESISTANCE TO CHEMICAL AGENTS

Long-term resistance to fresh water, seawater, lime, caustic solutions and cleaning agents. Short-term resistance to gasoline and diesel fuel. Not resistant to organic acids, concentrated acids mineral acids or solvents. Detailed information available in the "Dylatan Chemical Resistance Table".

WHEN USED AS A SEALANT

In order to guarantee the free movement of the sealant in the joints, it is essential to check that the product does not adhere to the underside of the joint. Therefore, use a polyethylene rope at the correct depth for correct sealing. Prime the sides with a suitable primer and pay attention to the waiting time to avoid the formation of bubbles in the uncured sealant due to temperature rise. Apply the sealant making sure that full contact is made with the sides of the joints and the PU cord at the bottom. Screw the nozzles to the cartridge and apply with a constant flow of sealant to avoid air bubbles. Avoid applying sealant in layers to remove air bubbles.

The sealant should be smoothed with a spatula to ensure maximum contact with the bonded surfaces and the PU cord. This is also to remove air bubbles created during application. Use masking tape to achieve surface protection from unwanted contamination. The tapes should be removed before the skin is formed.

WHEN USED AS AN ADHESIVE

Apply pointwise or linearly to the prepared surface and then press the parts together firmly.

INDICATIONS AND LIMITATIONS

Treatment and finishing of the sealant must take place at the latest by the time of skin formation. The expansion joint sealant can be painted after it has dried. The paint must be tested for compatibility by carrying out preliminary tests. Attention should be paid to the presence of alcohol or alkyd resins, as these can interfere with the curing process of the sealant and shorten the drying time of the paint. Special attention should be paid to this as the hardness and thickness of the paint can affect the flexibility of the sealer and lead to paint cracking. Avoid use when chlorine levels are high (avoid sealing joints in swimming pools where chlorine is used). Do not use if in close contact with curing silicone. Avoid contact with alcohol and other solvents, cleaning agents during curing. Do not use when there is a possibility of moisture or vapour transfer from the substrate, as this may cause blistering in the sealant. Avoid air bubbles when applying the sealer. The sealant cures by reacting with atmospheric moisture, so ensure optimum air supply. Bonded parts may require additional fixing or support during curing.

CLEANING OF EQUIPMENT

Clean tools with acetone or alcohol immediately after use. Cured material should be removed mechanically.

HEALTH AND SAFETY RECOMMENDATIONS

Keep out of the reach of children. In case of skin contact, remove immediately and wash with soap and water. Refer to the safety data sheet before use.

CONTAINERS

ALU-PE foil 600 ml.: 20 pcs. / cardboard

STORAGE

The expansion joint putty can be stored for 12 months in its original packaging (closed container) at 10°-25°C in a cool, dry place. Temperature should not exceed 25°C for extended periods. Keep away from wet surfaces, direct sunlight and heat sources.

GENERAL INFORMATION

The information contained in this technical data sheet is in accordance with our current knowledge, based on the knowledge and experience gathered to date, and cannot be used as a certainty, due to the variety of materials present on the market and the fact that the conditions of use are beyond our direct control and supervision. NPT srl guarantees the constant quality of the product. NPT srl has the right to modify and update this data sheet truthfully. Please check that you are in possession of the latest version.

ALWAYS READ THE PRODUCT DATA SHEET BEFORE USING THE PRODUCT!

Note: *The above information has been compiled to the best of our technical knowledge, but is not legally binding.*

Hygienic Approval No. 408/322/416/2020

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