CRYSTAL ADHESIVE

Characteristics

- Universal MS polymer based adhesive sealant
- Jointing and gluing
- Bonds also with slightly moist supports
- Suitable for use with natural stone
- Does not cause any corrosion in metal joints
- Paintable with most water and solvent based paints
- Extremely strong and permanently elastic
- Excellent U.V., weather and aging resistance
- Solvent, isocyanate and phthalate free

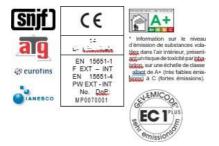
Applications

- For interior and exterior use.
- All jointing where flexibility is important:
 - Sealing of horizontal and vertical expansion and connecting joints (max. width 50mm).
 - Sealing of joints and cracks in car, caravan, train and bus construction, in containers, in air-conditioning installations...
 - Sealing between frame and wall, connecting joints of window and door frames, in facades and shop fronts...
 - Sealing and gluing work in veranda's, bathrooms, kitchens, etc.
 - Sound proofing between concrete and drain pipes.
- Gluing and sealing of skirting boards, steps, doorsteps, protective profiles, covers, prefab elements...
- Bonds without primer on almost all materials used in the construction industry, such as aluminium, galvanized and stainless steel, zinc, copper, natural stone, HPL panels, treated wood, gypsum, various synthetic materials, glass (not for glazing joints), etc.
- Can also be used on absorbent surfaces such as concrete and brick. A primer is recommended for optimal adhesion.
- Meets the requirements of FDA code 21 §177.2600 (e) for food contact.

Technical approvals

SNJF (Société National du Joint Français):FACADE n° 3749 Mastic type élastomère classe 25EATG (Belgische Nationale goedkeuring)ATG 12/2643 Leeds certificate for low VOC. (getest door Eurofins)FDA code 21 §177.2600 (e) (lanesco rapport Nr. 15/19449)CECECALEURO

EC1PLUS



Technical characteristics

Basic ingredient	MS polymer	
Curing system	By means of humidity	
Number of components	1	
Skin formation time (23°C and 50% R.V.)	40 min.	
Vulcanisation rate (23°C and 50% R.V.)	2,5 - 3 mm after 24 h	
Density: ISO 1183	1,48 g/ml	
Processing temperature	+5°C - +40°C	
Shelf life, in original packing in dry conditions between +5°C - +25°C	12 months	
Shore A hardness: ISO 868	40	
Joint movement capacity: ISO 11600	25%	
Modulus at 100% elongation: ISO 8339	0,80 N/mm ²	
Elongation at break: ISO 8339	230%	
Modulus at break: ISO 8339	1,10 N/mm ²	
Water vapour permeability: ISO 15106	μ = 6946; sd = 4,9m	
Solvent & isocyanate content	0%	
Dry matter content	ca. 100%	
Temperature resistance	-40°C - +90°C	
Very good moisture resistance and not sensitive to frost		

Method of use

Preparation

The support must be fixed and rigid enough. The support may be slightly damp. The materials to be joined must be clean and free from dust and grease. If necessary, degrease using Hygiclean, MEK, alcohol, or ethanol. It is advisable to do bonding tests. It is the user's responsibility to check whether the product is suitable for his application. Our technical department could be consulted.

Primers

For strongly absorbent supports it is recommended to use Primer.

Application

- Use in well-ventilated rooms. Good ventilation is important during application and vulcanisation of the product.
- <u>As adhesive:</u> Apply Hard Fix Glue with the supplied nozzle in strips or dots to the base or on the element to be bonded. The strips must be applied in vertical rows. Apply the strips parallel to each other, to allow the humidity to reach the adhesive between the strips. Bring together the parts to be joined as quickly as possible, at least within 10 minutes (this depends on the temperature and relative humidity level). The parts can at this stage still be adjusted finally, push down one over the other well or tap with a rubber hammer. It is advised to have a gap of 3.2 mm between the parts to be bonded spacer blocks or pieces of foam tape may be used), to allow the adhesive to smooth out any distortions (especially important in exterior use or under humid conditions). If the adhesive layer does not have to take up any, or only has to take up a slight mutual distortion between the joining parts, a thinner adhesive layer (at least 1.5 mm) will suffice (for example in interior applications).
- <u>As sealant:</u> Provide shallow joints (on the floor) with a self-adhesive tape or foam tape to prevent triple-sided bonding. The adhesive depth of the movable joint should amount to approx. 2/3 of the joint width. Joints that are too deep should be filled with suitable filler foam (PE or PU-filler foam). With deep floor joints, it is advisable to use a strong PU-filler foam as back-up material. With floor joints, which are subjected to high mechanical load, the sealant should be applied deep. It is better to apply the sealant at an angle sloping from the floor surface to the adhesive surface (rim sides). The sealant should only bond at the sides of the joint.

Joint dimensions

The necessary width of a dilation joint depends on the temperature fluctuation, properties of the material and the dimensions of the construction elements. Apply at least a joint width of 6 mm.

Joint width	Joint depth	Allowed difference
6 mm	6 mm	± 1 mm
8 mm	8 mm	±1mm
10 mm	6-8 mm	± 2 mm
15 mm	10 mm	± 2 mm
20 mm	10-12 mm	± 2 mm
25 mm	15 mm	± 3 mm
35 mm	20 mm	± 3 mm
50 mm	30 mm	± 3 mm

Cleaning

Any adhesive that may protrude along the edges can be removed using a stopping knife. Adhesive residue that has not yet dried, can be removed using Hygiclean. Cured adhesive must be removed mechanically.

Painting

Paintable with most water and solvent based paints. Can be painted wet on wet. After 48 hours, the surface must be cleaned first before it can be painted. Pre-testing is necessary. Alkyd paints might require an extended drying time.

SAFETY

Please consult the safety data sheet on simple request.

LIMITATIONS

- Permanent exposure to high relative humidity may cause fungal growth.
- Not suitable for joints with a width or depth < 5 mm.
- No adhesion on PE, PP, PA, PTFE (Teflon®) and bituminous substrates.
- On bituminous surfaces: use Paraphalt.
- On polycarbonate and polyacrylate: use Parasilico PL.
- Not suitable for permanent immersion.
- Do not use as a glazing sealant.
- Not compatible with the edge seals of insulating glazing and the PVB films of safety glass. Avoid direct contact.