



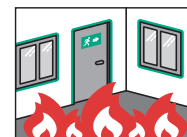
RAMSAUER®

325

LASTING BONDS.

Brandschutz Hybrid

1-component hybrid sealant

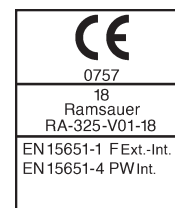


Technical data sheet

Version: 04-2023

Tests:

- DIN EN 13501-1, Class B-s1, d0
- DIN EN 15651-1 F2OLM Ext.-Int.
- DIN EN 15651-4 PW12.5E Int.
- EMICODE EC¹PLUS "very low emissions"
- Fulfils the French VOC requirement Class A+



1. Mechanical Properties



Basis	Hybrid MS polymer
Skin formation time	~ 5 Min. (23°C/50% relative humidity)
Full curing time	~2-3 mm/24 hours (at +23°C/50% relative humidity)
Density	~ 1.52 (EN ISO 1183-1)
Shore A hardness	~ 30 (DIN EN ISO 868)
Volume shrinkage	~ 1.5% (EN ISO 10563)
Tear propagation resistance	~ 7.1 N/mm (ISO 34-1)
Non-sag property	< 3 mm
Module	~ 0.43 N/mm ² (EN ISO 8339)
Elongation at break	~ 100% (DIN 53504-S1)
Resistance to high and low temperatures	-40°C to +90°C (long-term exposure)
Application temperature (substrate, environment)	Lower +5°C, upper +35°C
Admissible total deformation	25%
Colours	Anthracite, slight structuring
Packaging	310 ml cartridge, other containers on request
Shelf life of cartridges and foil bags	9 months in original packaging in cool and dry storage conditions

2. Properties

325 Brandschutz Hybrid is a specially developed, intumescent, flame retardant material on a hybrid basis. With the tested fire class B-s1 d0, according to DIN EN 13501-1, 325 Brandschutz Hybrid meets the highest requirements for a sprayable sealant. The product is silicone-free, odourless, cures almost without shrinkage, resistant to morning dew and absolutely weatherproof. Due to the excellent adhesion on almost all substrates (also on damp substrates), the product is ideally suited for perimeter joints and sealing in fire protection areas. 325 Brandschutz Hybrid is paint compatible in accordance with DIN 52452 Part 4. However, due to the variety of paints and coatings available on the market, we recommend preliminary tests. Due to the elastic properties of the material, the sealant should not be painted over the entire surface. If the joint sealant is to be painted over or repainted, it must be noted that the fire protection properties of our product can be impaired.



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Key

+	Good adhesion without priming
-	No adhesion
Primer	Recommended primer

3. Priming table

Glass	+
Tiles	+
Pine wood	+
Wet ground concrete	+
Concrete, formwork smoothness	+
Steel DC 04	+
Hot-dip galvanised steel	+
Stainless steel	+
Zinc	+
Aluminium	+
Aluminium AlMg1	+
Aluminium AlCuMg1	+
Aluminium 6016	+
Anodised aluminium	+
Brass MS 63 Hardness F 37	+
PVC Kömadur ES	+
PVC soft	+
PC Makrolon Makroform 099	-
Polyacrylic PMMA XT 20070 Röhm*1	+
Polystyrene PS Iroplast	+
ABS Metzoplast ABS 7 H	+
PET	+
PU waste quality	+
Copper	+
Polycarbonate	+
PMMA Röhm sanitary quality	+
Mirrors*2	-
Natural stone	-

This table is based on adhesion tests with Rocholl test specimens under laboratory conditions. In practice, the adhesive properties depend on a large number of external influences (weathering, contamination, loads, etc.). Therefore, this table is for guidance only and does not constitute a binding statement. For further information please contact our application engineering department. The tests carried out above only refer to the adhesive properties and have no significance in terms of compatibility with the stated substrates.

*1: Different PLEXIGLAS® types exhibit certain differences in their chemical resistance. Stresses must be expected in some applications. The resulting stresses, in combination with certain agents, can lead to "stress cracking". The duration, temperature and concentration of the acting substance have a fundamental influence on any "stress cracks". When using our products in combination with PLEXIGLAS®, the suitability must therefore be checked in advance.

*2: The compatibility with various mirror coatings by different manufacturers is regularly tested in our laboratory. Advance testing is recommended due to production processes of the various manufacturers, into which we have no insights, and as a function of the existing substrate and bonding variants.

4. Application

Wherever there are special requirements and specifications for fire protection. 325 Brandschutz Hybrid is suitable for sealing joints in facades and panels, for expansion and butt joints in prefabricated concrete construction and for perimeter joints in window and door frames. Suitable for sealing connection and expansion joints in interior and exterior areas.



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5. Meets the requirements of IVD instruction sheet

No. 11	Explanations of technical terms used in "fire protection" from the point of view of sealants or joints sprayed with sealants
No. 12	Overpaintability of motion-compensating sealants in building construction. Requirements and impacts.
No. 16	Perimeter joints in dry construction. Possible applications of sprayable sealants.
No. 19-1	Sealing of joints and connections in the roof area. Possible applications of sprayable sealants, assembly adhesives, butyl sealing tapes and profiles.
No. 19-2	Sealing of joints and connections in the roof area. Possible applications of sprayable sealants, assembly adhesives, butyl sealing tapes and profiles. Part 2 Airtight layer.
No. 27	Sealing of connection and expansion joints on the facade with sprayable sealants
No. 28	Renovation of defective joint sealing on the facade
No. 29	Joint work in painting and decorating trade

6. Processing

General instructions: The expiry date of the material must be observed, otherwise the stated mechanical properties of the product can no longer be guaranteed. Observe the ambient temperature and substrate temperature. Before applying, it must be ensured that the backfilling materials used and all building materials in the contact area are compatible with the sealant. For fire protection applications, the backfill must be filled with a non-combustible fire protection material such as 1051 Rundprofil Hitzebeständig. **Pre-treatment of the adhesion surfaces:** the adhesion surfaces must be load-bearing, dry, and free of dust, grease, and oil. If required, carefully pre-treat the adhesion surfaces using a suitable primer. Adhesion and compatibility with plastics should be tested on a case-specific basis. Substrates containing tar and bitumen are unsuitable as adhesion substrates. **Joint design:** For motion compensating joints, the dimensions must be designed to absorb the maximum motion expected. The joint cross-section must be planned in advance and adhered to. Joint dimensions that do not comply with the state of the art are impermissible. **Application of the sealant:** Working within the application temperature limits, the product must be applied uniformly to the joint avoiding inclusions. If the substrate is pretreated with primer, its flash-off time must be observed. When reworking, good contact with the adhesive surfaces/joint edges must be ensured. The use of a specially adapted tooling agent is recommended. The joint must be tooled within the skin formation time. **Rework:** Any contamination caused by the use of tooling agents must be removed and cleaned up immediately. Contamination from adjacent substrates must be cleaned up when fresh, this is also recommended for contaminated processing equipment.

7. Application restrictions

Caution: Not suitable for sealing and bonding natural stone (edge zone contamination). For use in conjunction with roofing membranes/foils, please contact our application engineering department. Not approved for bonding mirror elements and/or coated glazing units – independent series of tests are recommended for this application. High-modulus sealants are not suitable for on-site substrates with low inherent strength, e.g., renders, aerated concrete, ETICS, etc.). When coating the sealing compound with alkyd resin paints, incompatibilities may occur (curing problems, sticky surfaces, discolourations, etc.). As a general rule, if the hybrid compound is coated subsequently, its compatibility with the coating or paint system used must be checked. Not suitable for sealing glass rebates. Not suitable for applications in permanently wet areas. Touch contact with materials containing bitumen and plasticisers, e.g. butyl, tar, asphalt, EPDM, neoprene, insulating paints or bituminous coating, etc., must be investigated in advance. Environmental influences (e.g., high temperature, UV exposure, chemical influences such as vapours, etc.) can permanently affect the product's appearance, but this has no negative effect on the product's mechanical properties. Before applying, the user must ascertain that the building materials (solid, liquid or in gaseous form) are compatible with the sealant in the contact area. High substrate or base temperatures during processing can lead to impairments of the mechanical properties.



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8. Safety instructions

Please refer to the current EC safety data sheets. Data sheets are available at any time from our website at www.ramsauer.eu.

9. Application notes

Good ventilation must be ensured during processing and curing. Due to the large number of possible influences during processing and application, the processor must always carry out a test processing before use. Note the expiry date of the material. 1-component sealants are not suitable for full-surface bonding. The curing speed increases with increasing coating thickness. If the 1-component material is used in coating thicknesses of more than 15 mm, please contact our application engineering department. If the products are stored and/or transported over a longer period of time (several weeks) at higher temperatures/humidity, the shelf life may be reduced or the material properties may change.

10. Liability for defects

The information, in particular the suggestions for the processing and use of our products, is based on our knowledge and experience in normal use cases at the time of printing. Depending on the specific circumstances, in particular with regard to substrates, processing and environmental conditions, the results may differ from this information. Therefore the guarantee of a work result or a liability, for whatever legal reasons, can be justified neither from these references, nor from a verbal consultation, unless we are guilty of intent or gross negligence in this respect. Ramsauer guarantees that its products comply with the technical properties specified in the technical data sheets until the expiry date.

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