
TECHNICAL DATA SHEET

PRODUCT **Bryson Intumescent Acrylic Acoustic Sealant**

DESCRIPTION

Bryson Intumescent Acrylic is a halogen free, polymer emulsion-based sealant that swells when subjected to temperatures in excess of 125°C and forms a char coat that restricts the passage of smoke and fire. It is easily applied and dries to a flexible and smooth surfaced material which is readily over paint able. It has excellent adhesion to a wide range of substrates and will not harden or crack with age.

SPECIFICATION COMPLIANCE

Bryson Intumescent acrylic has been independently tested to the following assessments:

-BS EN 1366-3: 2004 & BS EN 1366-4: 2006 Tested at Bodycote Warrington Fire, report No. 173658A achieving 4-hour integrity and insulation rating for a range of linear and penetration seals. See Appendix A on page 3 for further details.

-an indicative fire test based on the principals of BS476 Part 20 at Warrington Fire Research and achieved a 4-hour fire rating (integrity) for a range of vertical and horizontal joints up to 35mm wide between various non-combustible construction materials. A 1-hour fire rating (integrity) was achieved for a range of vertical joints up to 25mm wide between combustible materials (timber). (see performance data)

-BS EN ISO 10140-2: 2010 Measurement of Airborne Sound Insulation of Building elements. University of Salford reports 2612 – 76, 77, 79 - 81. The sealant maintained the integrity of a plasterboard partition wall with a Sound Reduction Index of 55Db.

-Classification of fire resistance data from test report FIRES-CR-199-16AUPE in accordance with EN13501-2 2007 +A1 2009 when tested as penetration seals round metal pipes and cables according to EN 1366-3 in a flexible wall.

VOC test report classification – M1 and Indoor Air Comfort GOLD®

APPLICATIONS

Bryson Intumescent acrylic forms a fire and smoke seal in joints up to 35mm wide without slumping. It is ideal for sealing joints in and around internal partitions and for sealing between fire door frames and fire-rated walls. (see appendix A)

It is recommended that a sealant depth of at least 8 mm be applied.
If the sealant is to be overpainted, building regulations may require a fire-resistant coating.

LIMITATIONS

Bryson Intumescent acrylic is not suitable in joints where movement exceeds $\pm 7.5\%$ of joint width, or in external joints.

TECHNICAL DETAILS

Movement Accommodation:	$\pm 7.5\%$ Conforms to ISO 11600 7.5P
Skimming Time:	15 mins to 1 hour depending on conditions.
Cure time:	5 to 15 days for 15mm X 20mm bead.
Hardness Shore A:	40-50
Tensile Strength (100%):	0.2 MPa
Temperature Resistance:	-20°C to +60°C (intermittent)
Paintability:	With most paints.
Application Temperature:	+5°C to 40°C
Cleaning:	Uncured sealant with water.
Shelf Life:	min. 18 months when stored in unopened containers as recommended.
Specific Gravity:	1.60 – 1.68

APPLICATION INSTRUCTIONS

To achieve a high-quality joint, clean all surfaces, remove dust and ensure surfaces are dry. Non-porous surfaces should be degreased using a suitable degreasing agent. Highly porous surfaces should be sealed with a suitable primer. Apply masking tape to each side of joint and gun sealant firmly into joint, smoothing off with a wetted spatula. Masking tape should be removed within 10 minutes of application.

COVERAGE

A 310ml tube is sufficient to produce a joint approx. 1m long of 20mm x 15mm

AVAILABLE PACK SIZES

Available in: - 310ml, 400ml, 900ml Cartridges and 600ml Foil Packs.

STORAGE

Store in cool dry conditions. PROTECT FROM FROST.

HEALTH AND SAFETY

Bryson Intumescent Acrylic sealant presents no known health hazards when used as recommended. Consult Health and Safety data sheet for further information. As with all chemical product, care should be taken during use and storage to avoid contact with foodstuffs, skin, eyes and mouth. If accidentally ingested, seek medical attention do not induce vomiting and give copious amounts of water to drink. **KEEP AWAY FROM CHILDREN AND ANIMALS.**

Further Information

These data are offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate

APPENDIX A

Water based intumescent acrylic sealants are commonly used to seal gaps between Fire Door frames and the supporting wall. The fire resistance performance of the fire door, including the frame, glazing, hardware and any intumescent seals incorporated within the door and frame, is assessed by testing the system according to the principals of BS476 parts 20-22, and more recently to BS EN 1634. However, within these standards there is no specified requirement for the seal between the frame and the supporting wall.

To simulate a test of the fire resistance of Bryson intumescent acrylic sealant when used to seal between certain types of timber fire door frame and supporting wall, the sealant was tested according to BS476 part 20 in linear gaps between sections of timber fixed in a solid wall. The performance data, which is shown below, is taken from Warrington Fire test report 59021 and assessed in BRE report CC201709.

Substrate	Backing Material	Seal Location	Gap width range(mm)	Sealant Depth mm	Integrity & Insulation
SINGLE SEAL VERTICAL JOINTS IN 100MM TIMBER SOLID WALL					
Hardwood/Hardwood	PE foam rod	Either face	< or = 25	25	EI30
Hardwood/Hardwood	PE foam rod	Either face	12 to 25	35	EI60
Softwood/softwood	PE Foam rod	Either face	< or = 25	35	EI60
SINGLE SEAL HORIZONTAL JOINTS IN 100MM TIMBER SOLID WALL					
Hardwood/hardwood	PE foam rod	Either face	< or = 25	25	EI60
Softwood/softwood	PE foam rod	Either face	< or = 25	35	EI60
DOUBLE SEAL VERTICAL JOINTS IN 100MM TIMBER SOLID WALL					
Hardwood/hardwood	PE foam rod	Both faces	< or = 25	12.5	EI30
Hardwood/hardwood	PE foam rod	Both faces	12 to 25	17.5	EI60
Softwood/softwood	PE foam rod	Both faces	< or = 25	17.5	EI60
DOUBLE SEAL HORIZONTAL JOINTS IN 100MM TIMBER SOLID WALL					
Hardwood/hardwood	PE foam rod	Both faces	< or = 25	12.5	EI60
Softwood/softwood	PE foam rod	Both faces	< or = 25	17.5	EI60

IMPORTANT NOTE

When installing fire doors as part of passive fire protection it is most important to check the specification of the fire door rating to ensure the perimeter frame seal gives the same degree of protection and also the recommendation of the fire door manufacturer and/or the specifier for the detail of the perimeter frame sealing method.

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