



## PRODUCT DESCRIPTION

iPASSIVE FR IPT is a high performance, one part ready to use sealant and adhesive and is designed for sealing joints, voids, irregular holes in walls, partitions and other structures, providing an airtight and watertight seal.

iPASSIVE FR IPT is based on an innovative new Inert Polymer Technology that is suitable for a wide variety of building trade applications including decorating, flooring, joinery, plumbing and tiling. iPASSIVE FR IPT is a non-reactive environmentally friendly one-stop solution for all internal building applications and out performs conventional silicone, MSP, butyl and acrylic based products as a sealant and adhesive. iPASSIVE FR IPT is the only sealant free from dangerous emissions.

## PROPERTIES

iPASSIVE FR IPT is permanently flexible and is paintable with both alkyd resin and water-based paints. iPASSIVE FR IPT is an excellent adhesive for general construction fixing and bonding with very good initial grab quickly developing a high bond strength.

Rated Type X for use in conditions exposed to weathering iPASSIVE FR IPT provides primerless sealing and bonding for a wide range of substrates including :

- Brick, concrete, stone, slate, ceramic, marble, granite
- Timber, plywood, block board, chipboard, fibreboard
- Metals, aluminium, steel, lead, copper and alloys
- Plasterboard and plaster, insulating board
- uPVC plastic trims and polycarbonate
- Expanded polystyrene
- Painted surfaces

Suitable applications include :

- Air and sound sealing
- Fire resistant sealing
- Sealing where air quality for health is important
- Sealing around doors and windows
- Sanitary applications including showers
- Sealing of gaps around fitted furniture and worktops
- Sealing around flooring
- Radon resistant sealing
- Decorating caulking and sealing

## TECHNICAL INFORMATION

<b>Condition</b>	Ready for use, acrylic based filler
<b>Specific gravity</b>	1,54 g/cm <sup>3</sup>
<b>VOC</b>	0 g/l
<b>Durability w/ageing:</b>	Type X (UV / water) (pass)
<b>Chemical resist.</b>	Test passed (resistant)
<b>Salt water immersion:</b>	Test passed (resistant)
<b>Microbiologic growth:</b>	0 (no growth)
<b>Hardness:</b>	Shore A 47
<b>Shrinkage</b>	15% volume single sided
<b>Tensile properties</b>	3,79 MPa (379 N/mm <sup>2</sup> )
<b>Tensile elongation</b>	270%
<b>3D-tensile properties</b>	0,24 MPa (24 N/cm <sup>2</sup> )
<b>3D-tensile elongation</b>	106%
<b>Tear properties</b>	50%
<b>Compression resistance</b>	434 N / 1569 MPa
<b>Radon resistance</b>	1.5mm thickness IPT gives Z = 2.9 108 s/m
<b>Flashpoint:</b>	None
<b>Reaction to fire</b>	Classification D-s2, d0
<b>Fire resistance</b>	Up to -/240/240
<b>Tack free time</b>	60 minutes maximum
<b>Skin time</b>	30 minutes maximum
<b>Rate of cure</b>	10% at 24hrs
<b>Solids content</b>	>80%
<b>Shelf life</b>	Up to 24months when stored in unopened cartridges under cool dry conditions and 6 months in opened and resealed cartridges. Avoid temperatures above 35°C & below 5°C.
<b>Thermal Conductivity</b>	0,845 W/mK (+/- 3%) at 20mm depth (to EN 12667).
<b>Compatibility:</b>	Can be used in contact with most building and decorating materials.
<b>Service Temp</b>	40°C
<b>Classification</b>	Facade (interior) 25LM Sanitary joints XS1
<b>Colours</b>	White
<b>Packaging</b>	300ml cartridge & 600ml foil
<b>Health &amp; safety</b>	No health hazard, indoor hygiene EMICODE EC1PLUS classification, approved for BREEAM rated building projects. See safety data sheet.

## USAGE

Usage for a standard 300ml cartridge:

<b>Joint size (mm)</b>	6x6	9x6	12x6	25x10	7x7 fillet	10x10 fillet
<b>Linear metres/ cartridge</b>	8.63	5.5	4.1	1.2	12.0	6.0

## TESTED STANDARD

Tested and assessed in accordance with AS 1530.4 and AS 4072.1.

## FEATURES

- VOC free
- Fire rated for up to 4hrs
- Permanently flexible and paintable with both alkyd and water-based paints
- Excellent adhesion to most substrates
- Fast cure - Max bond strength achieved in 24hrs
- Water soluble while uncured for easy cleaning
- Suitable for all internal applications
- Radon resistant (radioactive particles)
- Mould and mildew resistant
- Excellent slump resistance
- 3D joint movement capability minimum 25%
- Low dirt pickup
- Paintable
- Low shrinkage
- Does not yellow

## LIMITATIONS

iPASSIVE FR IPT is soluble in water in wet/uncured state and cannot be applied submerged or in rain. Applied sealant must not be sprayed with water or other fluids before skin formation (<30 min).

iPASSIVE FR IPT should only be applied outdoors in dry conditions due to the design of the curing process technology.

Where metals are not compatible with water contact, they should be primed prior to any sealant application.

## FIRE RESISTANCE RATINGS

Construction	Minimum Thickness	Seal Orientation	Seal Position	Minimum Seal Depth	Backing Material	Maximum Joint Width	FRR
Flexible/Rigid Walls	64mm	Horizontal gaps at head of walls and soffit of floors	Both sides	12.5mm	12.5mm Stone wool 35kg/m <sup>3</sup>	30mm	-/60/60
	96mm						-/90/90
	100mm						-/120/120
Flexible/Rigid Walls	64mm	Horizontal/Vertical gaps in walls	Both sides	12.5mm	12.5mm Stone wool 35kg/m <sup>3</sup>	30mm	-/60/60
	96mm						-/90/90
	130mm						-/120/120
Rigid Floors	64mm	Horizontal	Both sides	15mm	20mm Stone wool 35kg/m <sup>3</sup>	30mm	-/90/90
	100mm						-/120/120
	150mm						-/240/240
	64mm		above backer at any height within floor	25mm	48mm AES mineral fibre 128kg/m <sup>3</sup>	30mm	-/90/90
	100mm						-/120/120
	150mm						-/240/180

## DISCLAIMER

As a part of our policy of on-going product development and testing, we reserve the right to modify, alter or change product specifications without giving notice. All information contained in this document is given in good faith and is provided for guidance only. Any drawings provided are for illustrative purposes only. As iPASSIVE has no control over the methods or competence of installation and of prevailing site conditions, no warranties, expressed or implied, are intended to be given as to the actual performance of the product mentioned or referred to herein and no liability whatsoever will be accepted for any loss, damage or injury arising from the use of the information given.

## EMISSION INFORMATION

iPASSIVE FR Acrylic complies with the requirements of GEV. The results correspond to the EMICODE emission class EC 1<sup>PLUS</sup> which is the best possible environmental and indoor hygiene health protection mark.

Compound	Emission rate after 3 days	Emission rate after 4 weeks
TVOC	7,7 µg/m <sup>3</sup>	< 5 µg/m <sup>3</sup>
TSVOC	n.d.	n.d. (< 5 µg/m <sup>3</sup> )
VOC w/o NIK	n.d.	n.d. (< µg/m <sup>3</sup> )
R Value	< 1	< 1
Formaldehyde	< 3 µg/m <sup>3</sup>	< 3 µg/m <sup>3</sup>
Acetaldehyde	< 3 µg/m <sup>3</sup>	< 3 µg/m <sup>3</sup>
Sum for+ace	< 0,002 ppm	-
Carcinogenic	n.d. (< 1 µg/m <sup>3</sup> )	n.d. (< 1 µg/m <sup>3</sup> )

n.d. = not detected

## SOUND INSULATION

Description	Sound reduction
Single sided seal ≥ 12mm depth	62 dB
Double sided seal ≥ 12mm depth	> 62 dB

iPASSIVE FR IPT has been tested at BM Trada (UKAS accredited); according to EN ISO 10140-2:2010.