

QUICK VIEW	Application:	Linear gap joint seals – movement
	Fire resistance period:	240 minutes
	Insulation/integrity:	Insulation and integrity
	Test standard:	BS 476: Part 20: 1987 and BS EN 1366-4: 2006
	Approval type:	IFCC Certificate No. IFCC1030

Fire Rated Silicone Sealant

Pyroplex® Fire Rated Silicone Sealant is a one part, low modulus, neutral cure, halogen free product. It is suitable for the sealing of construction joints and around pipe penetrations which have been protected by the recommended Pyroplex® intumescent product. It is also ideal for the weathersealing of curtain walling, building facades and expansion joints in fire rated walls.

It is fire rated up to 4 hours and offers excellent adhesion to many common building substrates. It has outstanding resistance to ozone, UV and temperature extremes and is tack free within two hours.

It is tested to BS 476: Part 20: 1987, BS EN 1366-4: 2006 and has a European Classification EI240 in accordance with BS EN 13501-2: 2007.

IFCC Certificate No. IFCC1030

Product Data



Field of application

Pyroplex® Fire Rated Silicone Sealant has been designed for use when:

- Sealing linear gap joint seals.
- Sealing around metallic pipe penetrations.
- Sealing around plastic pipe or cable penetrations which have been protected with the recommended Pyroplex® intumescent product eg. pipe collar, pipe wrap.

Product features

- Fire resistance up to 240 minutes.
- Outstanding resistance to ozone, UV and temperature extremes.
- Excellent adhesion to many common building substrates.
- Fast cure [tack free in 2 hours].
- Joint movement accommodation +/-25%.
- Pyroplex® Fire Rated Silicone Sealant is fire rated – it is not intumescent.

Product data

Ref.	Seal width	Seal depth	Joint type	Backing media	Integrity	Insulation
E	15mm	10mm	Single	PE	240 mins	180 mins
F	40mm	25mm	Double	MW	240 mins	240 mins
J	25mm	15mm	Single	PE	240 mins	120 mins
L	15mm	10mm	Double	MW	240 mins	240 mins

Installation instructions

1. For external applications ensure that all the surfaces are clean, dry, sound and frost free. Clean all joints thoroughly to ensure that the adhesion of the silicone to the substrate is not impaired.
2. It may be necessary to mask adjacent areas to prevent contamination and to ensure a neat sealant line. Masking tapes should be immediately removed after tooling and finishing.
3. Install backing materials as required and fill the cavity or void with silicone.
4. The joint should be tooled within 5 minutes of application to ensure good contact between the silicone and substrate. Tooling of the sealant also gives a smooth and professional finish.

5. Excess silicone should be cleaned off and non-porous surfaces cleaned whilst in an uncured state using a suitable solvent. Sealant adhering to porous surfaces should be left until it has cured, then remove by mechanical means.
6. Dispose of spent cartridges in accordance with local regulations.

Product packaging

Pyroplex® Fire Rated Silicone Sealant is supplied in:



310ml cartridges

Quality approval

Pyroplex Limited has a Quality Management System that meets the requirements of ISO 9001:2008, and is independently verified by BSI Quality Assurance under Certificate No. FM10371.

Other information

The information contained herein is based upon the present state of our knowledge. Recipients of our Pyroplex® products must take responsibility for observing existing laws and regulations.

Due to our policy of continuous improvement Pyroplex Limited reserves the right to amend specifications without prior notice.

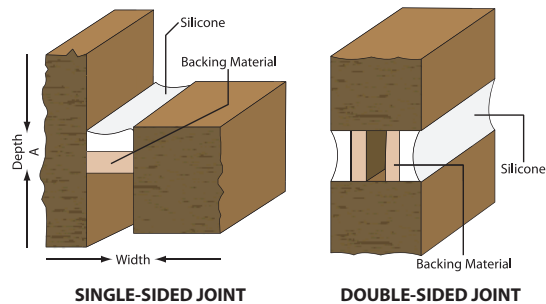
Technical Data

Product testing

A number of independent fire resistance tests have been carried out to confirm the suitability of the product and to demonstrate product compliance by utilising BS 476: Part 20: 1987, BS EN 1366-4: 2006 and other international standards. Pyroplex® Fire Rated Silicone Sealant has a European Classification EI240 in accordance with BS EN 13501-2: 2007. IFCC 1030 accreditation applies.

Joint configuration

The fire resistance performance of the material is based upon the joint configuration and the position and location of the seal, within the construction and backing materials used.



Backing material

Backing materials	
PE	Polyethylene, with a nominal density of 0.35kg/m ³
MW	Mineral wool, with a nominal density of 100kg/m ³

Structural constructions

Pyroplex® Fire Rated Silicone Sealant can be used in walls and floors, of a solid construction.

Construction element	Fire resistance period [mm]	Minimum thickness	Material types and minimum density
Wall and floor	Up to 120 minutes	100mm	Solid masonry work*, with a density no less than 650kg/m ³
Wall and floor	Up to 240 minutes	150mm>	Solid masonry work*, with a density no less than 650kg/m ³

* Aerated concrete, lightweight ash blocks and/or solid brick construction.

Wall construction and fire resistance periods:

- Aerated concrete, lightweight ash blocks and/or solid brick construction.

Consumption guide

Depth	Width				
	6mm	10mm	15mm	20mm	25mm
10mm	5.2m	3.1m	2.1m	1.0m	1.24m
15mm	3.45m	2.1m	1.4m	1.0m	0.8m
20mm	2.6m	1.6m	1.0m	0.8m	0.6m

Linear metres per 310ml cartridge, the figures quoted estimated and for guidance only.

Maintenance and installation records

Pyroplex Limited recommend that all firestopping materials are checked on a regular basis to ensure that the product remains integral.

Product guarantee

Providing the product is installed in accordance with the requirements of the guidance document, the fire performance characteristics of the product is guaranteed for a period of 10 years.

Technical support and guidance

Should you require any further information regarding this product please contact Pyroplex Limited or visit our website, www.pyroplex.com

Material Safety Data

Composition/information on ingredients

Blend of Polydimethylsiloxanes, amorphous silica, fillers, additives and crosslinker. Substances presenting a health hazard within the meaning of the CHIP regulations or which are assigned.

Name	Conc. range	CAS No.	Symbol	R-phrases
Vinylsilane trimetghoxy	<5%	2768-02-7	Xn R	R10, R20
Titanium tetrabutanolate	<2%	5593-70-4	Xi	R10, R38, R41

Further information – During use, on contact with humidity in the air, the following are released:

Name	Conc. range	CAS No.	Symbol	R-phrases
Methanol	max. 3%	67-56-1	F T	R11, R23/24/ 25, R39/23/ 24/25
1-Butanol	<2%	71-36-3	Xn	R10, R22, R37/38, R41, R67

Possible hazards

Slightly irritating to eyes, respiratory system and skin. According to EC criteria, the product is not classified as a hazardous preparation.

First aid measures

General: In all cases of doubt or when symptoms persist, seek medical attention.

Inhalation: Move patient to fresh air, seek medical advice.

Skin contact: Remove contaminated clothing. Wash skin thoroughly with soap and water or a recognised skin cleaner. DO NOT USE SOLVENT OR THINNERS.

Eye contact: Contact lenses should be removed. Irrigate copiously with clean, fresh water for at least 10 minutes holding eyelids apart, and seek medical advice.

Ingestion: If accidentally swallowed wash out mouth with water and obtain immediate medical attention. DO NOT induce vomiting.

Fire fighting measures

Extinguishing media recommended: Alcohol resistant foam, CO₂, powder, water spray/mist.

Not to be used: Non known.

Accidental release measures

Exclude non essential personnel.

Avoid breathing vapours.

Do not allow to enter drains or water courses. If the product enters drains or sewers, the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the relevant Environment Agency.

Handling and storage

Handling: Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in areas of storage and use. Ensure good housekeeping and regular safe removal of waste materials.

Storage: Observe label precautions – Store between +5°C and +23°C in a dry well-ventilated place. Keep away from sources of ignition and direct sunlight. Store separately from oxidising agents and strongly alkaline and strongly acidic materials.

Exposure controls and personal protection

Exposure controls: Provide adequate ventilation during application and drying. Where practicable this should be achieved by the use of local exhaust ventilation. If this is not sufficient to maintain concentration of solvent vapours below the relevant Occupational Exposure Limit, suitable respiratory protection must be worn [see 'Occupational Exposure Controls'].

Substance	Occupational exposure limits	Notations
Methanol	8 hr LTEL [1] ppm mgm ⁻³	250
1-Butanol	15 min STEL [2] ppm mgm ⁻³	20

Exposure limits:

[1] Long-term exposure limit – 8 hour time weighted average.

[2] Short-term exposure limit – 15 mins time weighted average.

OEL's are taken from the current version of EH40.

Occupational exposure controls: All Personal Protective Equipment [PPE], including Respiratory Protective Equipment [RPE], used to control exposure to hazardous substances must be selected to meet the requirements of the COSHH regulations.

Respiratory protection: If exposure to hazardous substances cannot be controlled by the provision of natural ventilation e.g. work in enclosed areas, exposure should be controlled, where reasonably practicable, by the use of mechanical exhaust ventilation; when this is not reasonably practicable, suitable respiratory protective equipment must be worn.

Hand protection: When skin exposure may occur, advice should be sought from glove suppliers on appropriate types and usage times for this product. Barrier creams may help to protect exposed areas of skin but are not substitutes for full physical protection.

Eye protection: Eye protection should be worn.

Skin protection: Cotton or cotton/synthetic overalls are normally suitable.

Physical and chemical properties

Physical state:	Thixotropic paste
Specific gravity:	1.35 - 1.45 @ 20°C.
Solubility in water:	No – stable

Stability and reactivity

Stable under the recommended storage and handling conditions. In a fire, hazardous decomposition products such as smoke, carbon dioxide and carbon monoxide may be produced. Keep away from oxidising agents and strongly alkaline and strongly acidic materials to prevent the possibility of an exothermic reaction.

Toxicological information

Not classified as harmful if swallowed [by calculation].

The product has been assessed following the conventional method in CHIP and is classified for toxicological hazards accordingly. This takes into account, where known, delayed and immediate effects and chronic effects of components from short and long term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Ecological information

The Air Pollution Control requirements of regulations made under the Environmental Protection Act may apply.

The product has been assessed by the conventional method in CHIP and is not classified as dangerous for the environment.

Disposal considerations

Dispose of in accordance with local authority requirements.

Transport information

Transport within the users premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Onwards transport subsequent to purchase: Transport to be in accordance with ADR for road, IMDG for sea and ICAO/IATA for air.

Proper shipping name: The product is not classified as dangerous for carriage.

Regulatory information

The product is determined as not being dangerous according to the CHIP Regulations. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks as required by other health and safety legislation. The provisions of the Health and Safety at Work Act and the Control of Substances Hazardous to Health Regulations apply to the use of this product at work.

