



# Hilti CP 611A Firestop Intumescent Sealant

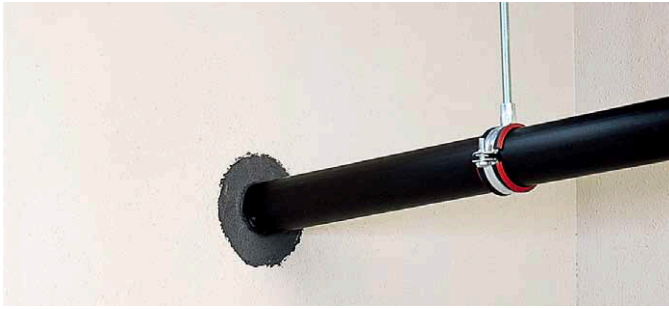
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**Firestop intumescent sealant CP 611A**



**APPLICATIONS**

- Single cables and cable bundles
- Plastic pipes up to 50 mm (2") diameter without additional collar
- Sealing penetrations previously sealed with firestop mortar, after installing additional cables
- Small openings

**ADVANTAGES**

- Paintable
- Fast, easy application and cleaning up
- Particularly suitable for laying new cables
- Silicone-free
- Easy to clean with water

**Technical data**

<b>Chemical basis</b>	Water-based acrylic dispersion
<b>Base materials</b>	Concrete, Concrete block, Metal, Wood, Gypsum
<b>Movement<sup>1)</sup></b>	No
<b>Expansion ratio (unrestricted, up to)</b>	1:10
<b>Approx. tack-free time (ventilated at 77°F, 80% rel. humidity)</b>	15 min
<b>Approx. curing time<sup>2)</sup></b>	3 mm/3 days
<b>Application temperature range</b>	5 - 40 °C
<b>Temperature resistance range</b>	-40 - 100 °C
<b>Storage and transportation temperature range</b>	5 - 25 °C
<b>Shelf life<sup>3)</sup></b>	12 Months

<sup>1)</sup> according to HTC 1250

<sup>2)</sup> at 75°F/24°C, 50% relative humidity

<sup>3)</sup> at 77°F/25°C and 50% relative humidity; from date of manufacture



**Consumption Guide**

Cartridge size = 310 ml (CP 611A)

Sealing volume in wall application (installation on both sides)

$$V_s = \frac{\pi}{4} \times (a^2 - c^2) \times 2b$$

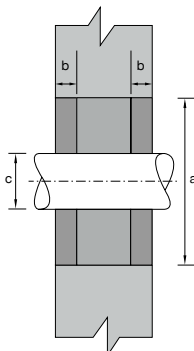
Sealing volume in floor application (installation on one side only)

$$V_s = \frac{\pi}{4} \times (a^2 - c^2) \times b$$

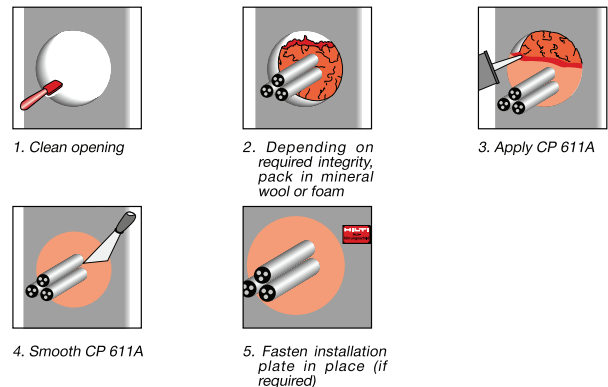
a = hole diameter in cm  
 b = installation depth in cm (see approvals)  
 c = outside diameter of pipe or bunched cable diameter in cm

No. of cartridges needed,

$$n = \frac{V_s}{310 \text{ (ml)}}$$



**Application Procedure**



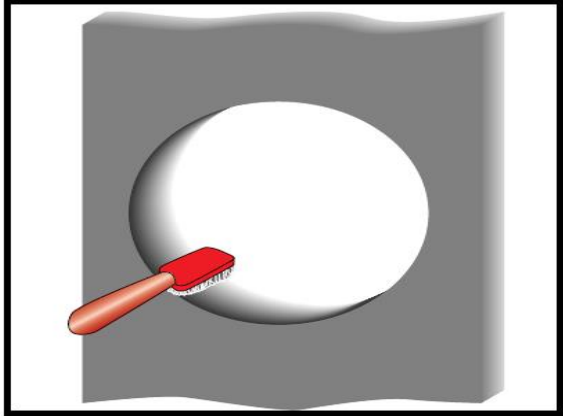
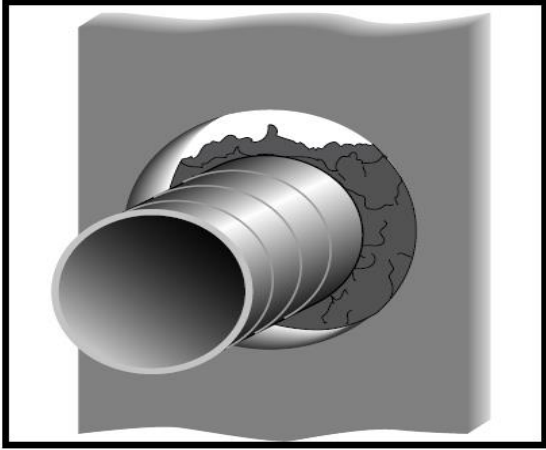
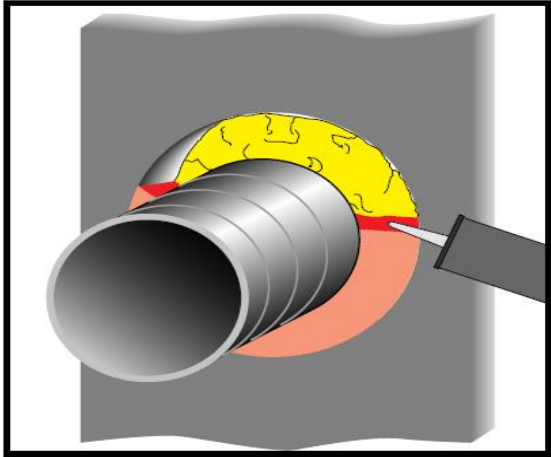
**Order Now**

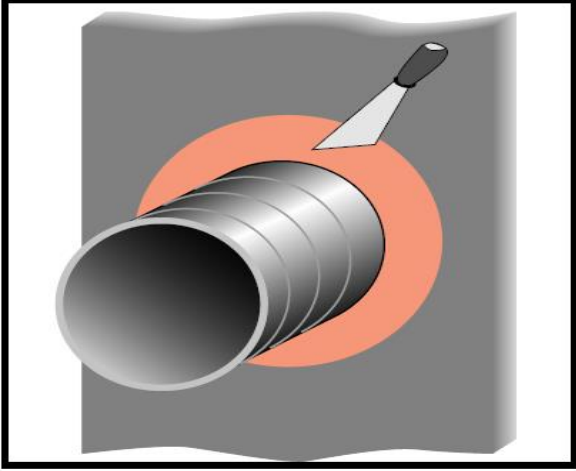
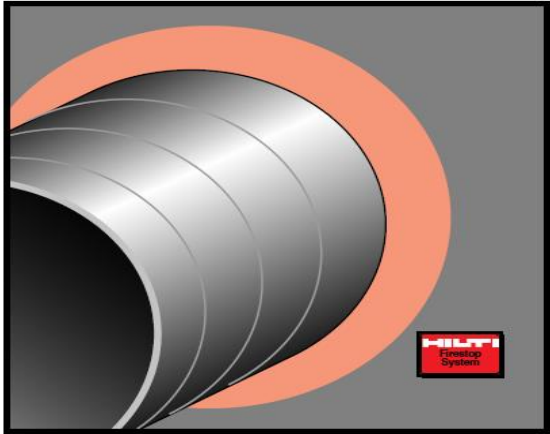


Ordering designation	Colour	Volume per unit	Packaging	Sales pack quantity	Item number
CP 611A INT	Anthracite	310 ml	Cartridge	1 pc	220351

Please visit Hilti website for the latest item numbers and related products

**Subject:** Method Statement of CP 611A for Penetration Seal.  
**Material:** CP 611A firestop intumescent sealant  
**Accessory:** Hilti Dispenser CFS-DISP or equivalent.

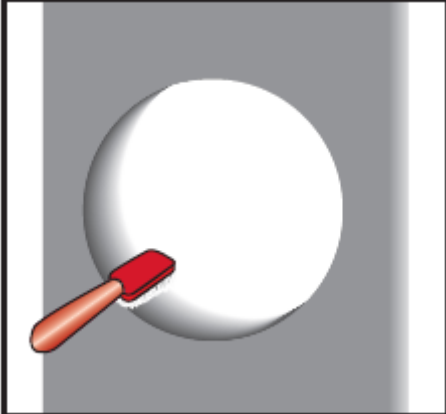
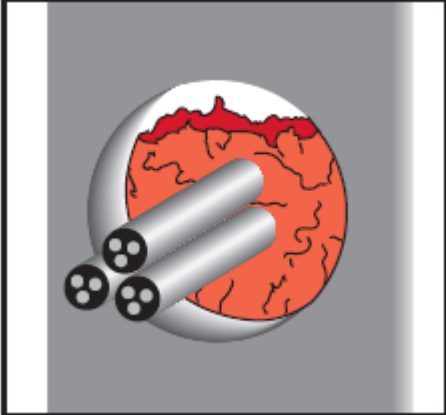
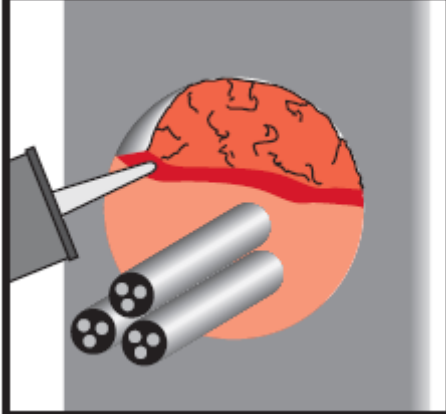
Setting Operation		
1	<p>Clean the opening. Surfaces to which CP 611A will be applied should be cleaned of loose debris, dirt, oil, wax and grease. The surface should be moisture and frost free.</p>	
2	<p>Insert the required fill of mineral wool and backer.</p>	
3	<p>Apply firestop CP 611A over backer.</p>	

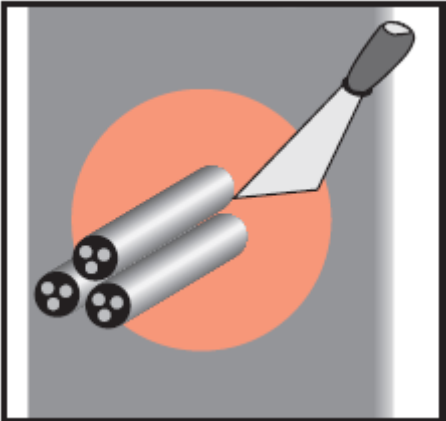
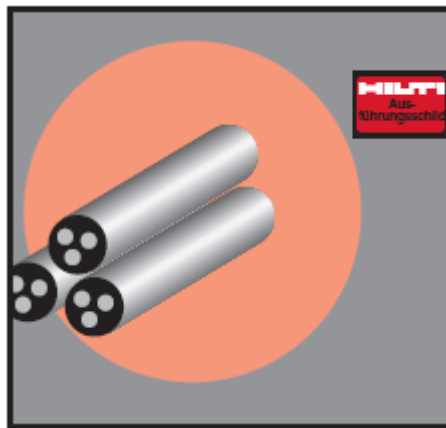
4	<p>Smooth the firestop sealant with a trowel before the skin forms. Once cured, CP 611A can only be removed mechanically.</p>	 A 3D cutaway diagram of a grey pipe passing through a grey wall. An orange firestop sealant is applied around the pipe. A trowel is shown smoothing the sealant on the wall surface.
5	<p>For maintenance reasons, a penetration seal could be permanently marked with an identification plate. In such a case, mark the Identification plate and fasten it in a visible position next to the seal.</p>	 A 3D cutaway diagram of a grey pipe passing through a grey wall. An orange firestop sealant is applied around the pipe. A small red identification plate with the HILTI logo is attached to the wall next to the sealant.

**Safety precautions:**

- Never use in areas immersed in water
- Not to be painted
- Store only in the original packaging in a location protected from moisture at a temperature of 5°C to 25°C
- Observe expiration date on package.

**Subject:** Method Statement of CP 611A for Joint Seal.  
**Material:** CP 611A firestop intumescent sealant  
**Accessory:** Hilti Dispenser CFS-DISP or equivalent.

Setting Operation		
1	Clean the opening. Surfaces to which CP 611A will be applied should be cleaned of loose debris, dirt, oil, wax and grease. The surface should be moisture and frost free.	
2	Insert the required fill of mineral wool and backer.	
3	Apply firestop CP 611A over backer.	

4	Smooth the firestop sealant with a trowel before the skin forms. Once cured, CP 611A can only be removed mechanically.	 An illustration showing a trowel being used to smooth a firestop sealant on a wall. The sealant is applied in a circular pattern around a penetration. The trowel is shown in the process of smoothing the sealant.
5	For maintenance reasons, a penetration seal could be permanently marked with an identification plate. In such a case, mark the Identification plate and fasten it in a visible position next to the seal.	 An illustration showing a penetration seal with an identification plate. The sealant is applied in a circular pattern around a penetration. An identification plate with the HILTI logo and the text 'Ausführungsschicht' is fastened to the wall next to the seal.

**Safety precautions:**

- Never use in areas immersed in water
- Not to be painted
- Store only in the original packaging in a location protected from moisture at a temperature of 5°C to 25°C
- Observe expiration date on package.

## ASSESSMENT REPORT

### The Fire Resistance Performance of Hilti "CP611A" for Cables Penetration Sealing Systems

**Report No.:** R23B01-1A  
**Issue Date:** 14 February, 2023  
**Date of Review:** 13 February, 2026

#### Report Sponsor

**Hilti (Hong Kong) Limited**  
701-704 & 708B, Tower A Manulife Finance Centre,  
223 Wai Yip Street, Kwun Tong, Kowloon, HK

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## REVISION HISTORY

Issue date (DD/MM/YYYY)	Issue number	Remark
14/02/2023	0	Initial version



## THE FIRE RESISTANCE PERFORMANCE OF CABLES PENETRATION SYSTEMS

### 1 INTRODUCTION

This assessment report presents an appraisal for the use of the Hilti "CP611A" for cables penetration sealing purpose in either floor mounted or wall mounted situation. The appraisal will be based on the test evidence WARRES no. 57312/A issued by Warringtonfire. This report is prepared for Hilti (Hong Kong) Limited of 701-704 & 708B, Tower A, Manulife Finance Centre, 223 Wai Yip Street, Kwun Tong, Kowloon, HK.

The proposed sealing for the cables penetration systems are required to provide a fire resistance performance of up to 240 minutes integrity and 30 minutes insulation with respect to BS 476: Part 20: 1987.

### 2 ASSUMPTIONS

The proposed systems are assumed to be installed in a similar manner to that of the previously tested system by competent installers. It is assumed that the modified systems will be constructed in a similar manner from materials and components of the same manufacture and equivalent quality as tested with supporting test evidence or otherwise appraised by RED. Further assumptions related to the specific modifications will be stated in the report.

It is also assumed that the supporting structures to which the perimeter of the systems will be fixed are capable of supporting the proposed structure effectively.

Assuming that the issue of the original test report is valid, the current testing standard or testing experience has not been changed and the procedures adopted for the original report have been re-examined and reviewed that there have been no changes to the specification of the construction considered in the original report. If contradictory data or any related evidence becomes available to RED, the assessment will be unconditionally withdrawn and the sponsor will be notified. This report is based on the given information, in which is declared by report sponsor that no contradictory data has become available.

### 3 SUPPORTING DATA

#### 3.1 Summary of Supporting Test Evidence

Report no.	Sections	Description
<b>Primary Test Evidence</b>		
WARRES report no. 57312/A	4.2	Supporting indicative test evidence for the use of the Hilti "CP611A" firestop mastic for cables penetration through floor construction achieved 240 minutes integrity performance with respect to BS 476: Part 20: 1987.

### 3.2 Primary Test Evidence

#### 3.2.1 Warringtonfire Test Report No. 57312/A#

A fire resistance test stated to be in accordance with BS 476: Part 20: 1987 to evaluate the fire resistance performance of four specimens of cables penetration sealing systems through vermiculite cement floor constructions (referenced H1, H2, H3 and H4) was performed by the Warringtonfire testing laboratory on 28<sup>th</sup> October, 1992. The report was prepared for Hilti (GB) Limited, the Hilti Entwicklungsgesellschaft mbH had given permission to use this data.

The section of floor was of 150 mm thickness. The floor was provided with four apertures and each with cables penetrating through it and sealed with a layer of 40 mm thick Hilti 'CP611A' mastic. The seals were installed flush with the soffit of the floor slab. The specimens 'H1' was an aperture of 120 mm diameter with 3 nos. of two core armoured cables each 23 mm diameter penetrating through it. Specimen 'H2' was an aperture of 120 mm diameter with 1 no. of four core 32 mm diameter armoured cable penetrating through it. Specimen 'H3' was an aperture of 130 mm diameter with 1 no. of four core 40 mm diameter armoured cable penetrating through it. Specimen H4 was an aperture of 90 mm diameter with 10 nos. of sixteen core telecommunication cables each 11 mm diameter penetrating through it.

The specimens satisfied the performance requirements specified in BS 476: Part 20: 1987 for the following periods:

Specimen Ref:	Integrity	Insulation
H1	240 minutes	75 minutes
H2	240 minutes	52 minutes
H3	240 minutes	60 minutes
H4	240 minutes	53 minutes

The test was discontinued after a heating period of 240 minutes (See WARRES no. 57312/A for full details).

#Note: the test data is more than five years old; we have reviewed this data against the current test procedures as per BS 476: Part 20: 1987 and found it suitable for this assessment.

## 4 PROPOSAL & DISCUSSION

### 4.1 The fire resistance performance of cables penetration sealing system using the Hilti “CP611A” with respect to BS 476: Part 20: 1987.

#### Proposal

It is proposed that Hilti ‘CP611A’ is used for the purpose of sealing the cable penetration through the masonry like supporting floor construction when the cables penetrating through similar to that tested in WARRES report no. 57312/A. The Hilti “CP611A” is used to seal up the void in between the cables and the aperture may be subjected to the following conditions:

- (a) The floor construction may be masonry like construction with the sizes of aperture may be up to 130 mm diameter;
- (b) The cables can be the two core up to four core armoured cable with diameter range from 23 mm to 40 and the arrangement can be a cable bundle of up to 3 cables within an aperture. The annular gap in between the cable/cable bundles and the aperture of the supporting construction shall have a nominal clearance of 30 mm wide. Also, the cables can be the telecommunication cables with diameter up to 11 mm and in a bundle up to 10 numbers. The annular gap in between the cable/cable bundles and the aperture of the supporting construction shall have a nominal clearance of 30 mm wide. The scope of application for the cored cables are as stated in the table below.

Cables description	Integrity	Insulation
3 nos. of two core armoured cables each 25 mm diameter	240 mins	60 mins
1 no. of four core armoured cables 32 mm diameter	240 mins	30 mins
1 no. of four core armoured cables 40 mm diameter	240 mins	60 mins
Maximum 10 no. of sixteen core telecommunication cables each 11 mm diameter	240 mins	30 mins

In the above application, it is assumed that the supporting floor construction shall carry at least equivalent fire resistance performance. The appraisal system shall be capable to provide 240 minutes integrity and 30 minutes or 60 minutes insulation performance with respect to BS 476: Part 20: 1987, depends on the cable configuration.

#### Discussion

The test evidence WARRES 57312/A described the test of four specimens of cables penetration sealed with the use of Hilti ‘CP611A’ mastic. The specimens that tested generally achieved 240 minutes integrity and the insulation performance nominally around 60 minutes when tested in accordance with BS 476: Part 20: 1987. So for a conservative assessment approach that considered, the appraised system shall be considered as providing 30 minutes insulation performance only.

- (a) The test evidence described cable penetration system through the steel reinforced vermicular cement flooring construction. The apertures that left within the floor were in the range from 90

mm to 130 mm with various type of cables penetrating through it. The nature of the vermicular cement flooring is a rigid supporting construction with the nominal density of 670 kg/m<sup>3</sup>. This implies that for flooring with higher density generally provide a better rigidity and less deformation during the test. This is eventually regard as a less onerous situation. Based on this, it is believed that most masonry construction with density higher than 670 kg/m<sup>3</sup> shall also be applicable.

The proposed maximum sizes of the aperture is directly adopt the tested situation, in which the range of 90 mm to 130 mm were used. Based on this, the maximum proposed sizes of 130 mm is considered as support by direct test evidence.

- (b) The proposed conditions that used to seal up the 2 core up to 4 core armoured cables penetration were directly referenced to the test evidence. Among the four specimens, three of them were the aperture with the penetration of various configuration of armoured cables. The proposed range of diameters, and the number of cables allowed in a bundle are all adopts the tested situation. Since the Hilti "CP611A" was the mastic and intumescent type sealant and the reaction to expand under heating is required to perform the sealing purpose. Therefore, enough mastic materials within the aperture is important. During the test, the annular gap that left between the cable and the floor of the aperture is generally in the range of nominal 30 mm to 45 mm. This proven that the amount of mastic that needs that can allow proper function of the sealing purpose shall be within this range. It is therefore proposed that the annular gap of at least 30 mm wide shall be left to allow enough mastic materials to be presented within the aperture. The depth of 40 mm thick Hilti "CP611A" and the installation method to make it flush with the soffit shall be followed the same as that tested.

The proposed conditions that used to seal up the telecommunication cables penetration were directly referenced to the test evidence as well. Among the four specimens, only 'H4' described the test using the telecommunication cables and therefore the proposed range of diameters, and the number of cables allowed in a bundle are bounded to the single test data. But again, the Hilti "CP611A" was the mastic and intumescent type sealant and the reaction to expand under heating is required to perform the sealing purpose. Therefore, enough mastic materials within the aperture is important. During the test, the annular gap that left between the cable and the floor of the aperture is generally in the range of nominal 30 mm to 45 mm. This proven that the amount of mastic that needs that can allow proper function of the sealing purpose shall be within this range. It is therefore proposed that the annular gap of at least 30 mm wide shall be left to allow enough mastic materials to be presented within the aperture. The depth of 40 mm thick Hilti "CP611A" and the installation method to make it flush with the soffit shall be followed the same as that tested.

In summary, the proposed application conditions of the Hilti "CP611A" are generally referenced to the tested condition, with some of them are appraised with a conservative approach.

## 5 CONCLUSION

The proposed use of Hilti "CP611A" mastic sealant for cables penetration sealing systems in floor mounted situation as discussed in Section 4 of this report, are capable to maintain the fire resistance performance of up to 240 minutes integrity and 30 minutes or 60 minutes insulation performance with respect to BS 476: Part 20: 1987.

## 6 DECLARATION BY APPLICANT

We, Hilti (Hong Kong) Limited, confirm that the material, component or element of structure, which is the subject of the test report being reviewed, has not to our knowledge been subjected to another test to the standard against which the assessment is being made.

We agree to withdraw this assessment from circulation should the component or element of structure be the subject of another test to the standard against which the assessment is being made.

We are not aware of any information that could affect the conclusions of this assessment.

If we subsequently become aware of any such information we agree to ask the assessing authority to withdraw the assessment.

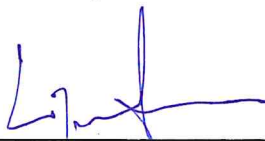
## 7 VALIDITY

This assessment is based on test data, experience and the information supplied. The assessment will be invalidated if the assessed construction is subsequently tested since actual test data is deemed to take precedence over an expressed opinion. Any changes in the specification of product will invalidate this assessment. This assessment relates only to the specimen assessed and does not by itself infer that the product is approved under any other endorsements, approval or certification scheme. Since the appraisal method is under development, the laboratory reserved the right to supersede this assessment in case the appraisal method had been changed.

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## 8 SIGNATORIES

Assessment by:



Dr. SZE Lip-kit

Test Consultant

Research Engineering Development

Façade Consultants Limited

Reviewed by:



Ir Dr. YUEN Sai-wing, MHKIE (Fire)

Authorized Signature

Research Engineering Development

Façade Consultants Limited

- End of Report -

## ASSESSMENT REPORT

### Fire Resistance Performance of Hilti CP611A Pipe Penetration Sealing Systems

**Report No.:** R21G06-1A  
**Issue Date:** 6 August, 2021  
**Date of Review:** 5 August, 2026

#### Report Sponsor

**Hilti (Hong Kong) Limited**  
701-704 & 708B, Tower A Manulife Finance Centre,  
223 Wai Yip Street, Kwun Tong, Kowloon, HK

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## REVISION HISTORY

Issue date (DD/MM/YYYY)	Issue number	Remark
06/08/2021	0	Initial version



## **FIRE RESISTANCE PERFORMANCE OF HILTI "CP611A" PIPE PENETRATION SEALING SYSTEMS**

### **1 INTRODUCTION**

This assessment report presents an appraisal for the fire resistance performance of Hilti "CP 611A" pipe penetration sealing systems that was tested under the reference WARRES No. 62293/A and 60300/B issued by Warringtonfire. It is prepared for Hilti (Hong Kong) Limited of 701-704 & 708B, Tower A, Manulife Finance Centre, 223 Wai Yip Street, Kwun Tong, Kowloon, HK.

The proposed Hilti "CP 611A" pipe penetration sealing systems are required to provide a fire resistance performance same as that originally achieved if subjected to a test utilising the general principles of BS 476: Part 20: 1987.

### **2 ASSUMPTIONS**

The proposed systems are assumed to be installed in a similar manner to that of the previously tested system by competent installers. It is assumed that the modified systems will be constructed in a similar manner from materials and components of the same manufacture and equivalent quality as tested with supporting test evidence or otherwise appraised by RED. Further assumptions related to the specific modifications will be stated in the report.

It is also assumed that the supporting structures to which the perimeter of the systems will be fixed are capable of supporting the proposed structure effectively.

Assuming that the issue of the original test report is valid, the current testing standard or testing experience has not been changed and the procedures adopted for the original report have been re-examined and reviewed that there have been no changes to the specification of the construction considered in the original report. If contradictory data or any related evidence becomes available to RED, the assessment will be unconditionally withdrawn and the sponsor will be notified. This report is based on the given information, in which is declared by report sponsor that no contradictory data has become available.

### 3 SUPPORTING DATA

#### 3.1 Summary of Supporting Test Evidences

Report no.	Sections	Description
<b>Primary Test Evidence</b>		
WARRES No. 62293/A	4.1	Supporting test evidence for the use of the Hilti 'CP 611A' on PVC pipe penetration sealing systems for fire resistance performance up to 245 minutes integrity and insulation.
WARRES No. 60300/B	4.1	Supporting test evidence for the use of the Hilti 'CP 611A' for PVC pipe penetration sealing systems for fire resistance performance up to 180 minutes integrity and 180 or 156 minutes insulation.

### 3.2 Primary Test Evidence

#### 3.2.1 WARRES Test Report No. 62293/A\*

A fire resistance test stated to be utilizing the test procedure of BS 476: Part 20: 1987 and pr EN 1366-3: 1993, using the general principle of AS 4072.1-1992 in conjunction with the general guideline from AS1530.4-1990. This report covered the test of two mastic seals: Hilti "CP 611A" to reinstate the integrity and insulation performance of a masonry wall at positions where apertures had been provided to allow for the penetration of various polyvinyl chloride (PVC) service pipes.

The specimens satisfied the performance requirements specified in BS 476: Part 20: 1987 for the following periods:

Specimen reference	PVC Pipe O/D & Wall thickness	Seal depth	Integrity	Insulation
A10	40 x 3 mm	60 mm from fire side	245 minutes	245 minutes
A11	40 x 3 mm	60 mm from non-fire side	245 minutes	245 minutes

The test was discontinued after a heating period of 245 minutes (See WARRES no. 62293/A for details).

\*Note: The test data is more than five years old; we have reviewed this data against the current test procedures as per BS 476: Part 20: 1987 and found it suitable for this assessment.

### 3.2.2 WARRES Test Report No. 60300/B\*

A fire resistance test stated to be utilizing the test procedure of BS 476: Part 20: 1987 and pr EN 1366-3: 1993, using the general principle of AS 4072.1-1992 in conjunction with the general guideline from AS1530.4-1990. This report covered the test of two mastic seals: Hilti "CP 611A" to reinstate the integrity and insulation performance of a aerated concrete floor at positions where apertures had been provided to allow for the penetration of various polyvinyl chloride (PVC) service pipes.

The specimens satisfied the performance requirements specified in BS 476: Part 20: 1987 for the following periods:

Specimen reference	PVC Pipe O/D & Wall thickness	Seal depth	Integrity	Insulation
A9	40 x 3 mm	80 mm from fire side	180 minutes	180 minutes
A10	40 x 3 mm	80 mm from non-fire side	180 minutes	157 minutes

The test was discontinued after a heating period of 180 minutes (See WARRES no. 60300/B for details).

\*Note: The test data is more than five years old; we have reviewed this data against the current test procedures as per BS 476: Part 20: 1987 and found it suitable for this assessment.

## 4 PROPOSAL & DISCUSSION

### 4.1 Fire resistance performance of Hilti CP 611A intumescent mastic sealant for pipe penetration systems with respect to BS 476: Part 20: 1987

#### Proposal

It is proposed that the Hilti "CP611A" intumescent mastic sealant for pipe penetration that was tested utilizing the general principles of AS 4072.1-1992 and AS 1530.4-1990 shall achieve similar results in terms of integrity and insulation performance with respect to BS 476: Part 20: 1987.

#### Discussion

The test evidence WARRES no. 62293/A and 60300/B described the test of the use of Hilti CP611A for the sealing of the aperture within the concrete wall and aerated concrete floor that allows the penetration of various PVC pipe services using the general principles of AS 4072.1-1992 and AS 1530.4-1999.

The fire tests on the Hilti CP611A for the sealing of the aperture within the concrete wall and aerated concrete floor that allows the penetration of various PVC pipe services using the general principles of AS 4072.1-1992 and AS 1530.4-1999. In reviewing the test, we have considered the design and installation of the specimen, the surrounding construction, the initial furnace temperature, the pressure in the furnace, the comparison of performance criteria of the fire tests, it is expected that if these fire tests had been conducted in accordance with BS 476: Part 20: 1987 very similar results would have been achieved.

#### Time/temperature relationship

Fire test to AS 1530.4-1999 and BS 476: Part 20: 1987 have the same furnace temperature-time curve, i.e., the standard ISO temperature time curve represented by  $T = 345 \log_{10}(8t + 1) + 20$ , where T is the furnace temperature rise and t is the time of heating conditions.

#### Furnace pressure control

The tested wall penetration seals were subjected to an over pressure of 16.2 ( $\pm 2$ ) Pa and the floor penetration seals were subjected to an over pressure of 18-20 Pa, 100 mm below the soffit. These over pressure are equal to or slightly greater than those which would be specified in BS 476: Part 20: 1987.

#### Comparison of performance criteria

The passing criteria for the standards of AS 4072.1-1992 are as follows:

**Integrity.** Evaluated on the unexposed surface via the occurrence of flames for more than 10 seconds and via openings within the specimen which allow a direct line of sight between the unexposed surface and the furnace chamber.

**Insulation.** Evaluated via thermocouples attached to the unexposed surface, the maximum rise of which at any point must not exceed 180 °C.

The passing criteria for the standards of BS 476: Part 20: 1987 are as follows:

**Integrity.** Evaluated on the unexposed surface via the occurrence of sustained flames, cotton pad and through gaps above specified dimensions.

**Insulation.** Evaluated via thermocouples attached to the unexposed surface, the mean rise of which must not exceed 140 °C and the maximum rise of which at any point must not exceed 180 °C. Insulation failure occurs simultaneously with integrity failure.

Having stated these criteria, it is discovered that the only significant differences between the performance criteria of these tests would therefore be the use of cotton pads, which is not specified in AS 4072.1: 1992. However, the observations recorded within the test reports indicate no through gaps or areas of glowing on the relevant specimens (62293/A A10 & A11 & WARRES Nos. 60300/B specimens A9 & A10), so neither application nor ignition of a cotton pad would be likely under these circumstances.

It is therefore believed that the both the test conditions and performance criteria utilised in the tests WARRES no. 62293/A and 60300/B are directly comparable between the AS 4072.1: 1992 and BS 476: Part 20: 1987.

## 5 CONCLUSION

The proposed use of Hilti "CP 611A" intumescent mastic sealant similar to that tested under WARRES no. 62293/A and 60300/B and modified as discussed in Section 4 of this report, is capable to maintain the fire resistance performance as originally achieved with respect to BS 476: Part 20: 1987.

## 6 DECLARATION BY APPLICANT

We, Hilti (Hong Kong) Limited, confirm that the material, component or element of structure, which is the subject of the test report being reviewed, has not to our knowledge been subjected to another test to the standard against which the assessment is being made.

We agree to withdraw this assessment from circulation should the component or element of structure be the subject of another test to the standard against which the assessment is being made.

We are not aware of any information that could affect the conclusions of this assessment.

If we subsequently become aware of any such information we agree to ask the assessing authority to withdraw the assessment.

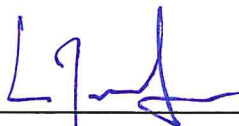
## 7 VALIDITY

This assessment is based on test data, experience and the information supplied. The assessment will be invalidated if the assessed construction is subsequently tested since actual test data is deemed to take precedence over an expressed opinion. Any changes in the specification of product will invalidate this assessment. This assessment relates only to the specimen assessed and does not by itself infer that the product is approved under any other endorsements, approval or certification scheme. Since the appraisal method is under development, the laboratory reserved the right to supersede this assessment in case the appraisal method had been changed.

This report only relates to the specimen(s) tested and may only be reproduced by the sponsor in full, without comment, abridgement and modifications.

## 8 SIGNATORIES

Assessment by:



Dr. SZE Lip-kit

Test Consultant

Research Engineering Development

Façade Consultants Limited

Reviewed by:



Ir Dr. YUEN Sai-wing, MHKIE (Fire)

Authorized Signature

Research Engineering Development

Façade Consultants Limited

- End of Report -



88 Empire Drive • St. Paul, Minnesota • 55103  
 (651) 642-1150 • fax (651) 642-1239

## VOC Content Test Certificate

October 26, 2009

Supplier: Hilti Entwicklungsgesellschaft mbH  
 BU Chemicals  
 Hiltistrasse 6  
 86916 Kaufering  
 GERMANY

Sample Description: Hilti CP 611A

Date tested: July 20, 2009

Test Method: SCAQMD method 304-91 Determination of Volatile Organic Compounds (VOC) in various materials as referenced by South Coast Air Quality Management District (SCAQMD) rule 1168. The values also comply with the requirements of EPA test method #24.

Test Data: Legend Project Number 0903311

Specification	Product
<b>LEED 2009 (LEED 3.0)</b> <b>LEED 2.2</b> IEQ-4.1: Low-Emitting Materials – Architectural Sealant	<b>Hilti</b> <b>CP 611A</b>
<b>Green Building Council of Australia</b> Green Star Office Design 3.0, IEQ-13 Green Star Office Design 2.0, IEQ-13 Green Star Office Interiors 1.1, IEQ-11	
<b>Architectural Sealant;</b> <b>VOC Limit: 250 g/L</b>	<b>Product contains: 56 g/L of VOC</b>

William Welbes  
 Vice President of Laboratory Operations

Allen Noreen, Ph.D.  
 Technical Director



Hilti (Hong Kong) Ltd.  
Unit 3 5/F Harbour Centre Tower 2  
8 Hok Cheung Street Hung Hom  
Kowloon

26 May 1994  
Handwritten initials and a large cross mark.

Dear Sirs,

Fire Resisting Penetration Sealing System  
As Supplied By Hilti (GB) Ltd.

Thank you for your letters dated 4.3.94 and 27.4.94 and the accompanying test/assessment reports on the above. You are asking for comments on the acceptability of the fire resisting product in the context of relevant provisions of the Buildings Ordinance, Chapter 123 of the Law of Hong Kong and its subsidiary legislation.

Under the Buildings Ordinance, "authorized persons" (i.e. architects, engineers or surveyors registered with the Building Authority) are required to supervise building works including the selection and installation of fire resisting products and to certify compliance with the Buildings Ordinance upon completion of works. Authorized persons are therefore responsible for ensuring the safety requirements inter alia of fire resisting products in the building projects which they have been appointed by the developer to coordinate and supervise.

In establishing the acceptability of fire resisting products, reference may be made to the performance standards laid down in Building (Construction) Regulation 90, the current Code of Practice for Fire Resisting Construction issued by the Building Authority and British Standard 476: Parts 20 to 24. Reliance may also be placed on the test/assessment report prepared by a recognized laboratory or an equivalent establishment.

The Buildings Department has a list of recognized laboratories. This is available for reference at our office :

Technical Administration (Building) Unit  
Buildings Department  
11/F Murray Building  
Garden Road Hong Kong

Before fire resisting products are installed in a building project, the authorized person appointed for the project should be approached for advice and guidance.

Your test/assessment reports are returned herewith. In this respect, please note that paragraph 3 of my letter dated 25 January 1994 is no longer applicable. The delay in replying is regretted.

Yours faithfully,



(Patrick H. Tsui)  
Technical Secretary/Building  
for Director of Buildings

消防處  
防火組  
香港九龍尖沙咀東部康莊道1號  
消防總部大廈



FIRE SERVICES DEPARTMENT,  
FIRE PROTECTION BUREAU,

FIRE SERVICES HEADQUARTERS BUILDING,  
No. 1 Hong Chong Road,  
Tsim Sha Tsui, East, Kowloon,  
Hong Kong.

本處檔號 Our Ref.: FPB 207/0005  
來函檔號 Your Ref.: L026/92HK  
電訊掛號 Telex: 39607 HKFSD HX } (24 小時 Hours)  
圖文傳真 Fax: 852-3110066 }  
852-3689744 }  
電話 Tel. No.: 733 7596

29 April 1992

Hilti (Hong Kong) Ltd.,  
Unit 3, 5/F, Harbour Centre,  
Tower 2,  
8 Hok Cheung Street,  
Hungghom, Kowloon.

Dear Sirs,

"HILTI" Fire Prevention System

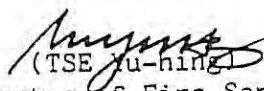
I refer to your letter of 30.3.92 and the enclosures attached thereto.

Based on the information contained in your letter under reference and the given test report, I understand that the captioned product is a building material which should be approved by the Director of Buildings and Lands. As such, I am not in a position to process your application and you are advised to refer your enquiry to the Director of Buildings and Lands, whose address is listed hereunder :-

The Director of Buildings and Lands,  
(Attn.: Technical Secretary/Building, B.O.O.)  
Murray Building,  
Garden Road,  
Central,  
Hong Kong.

Please feel free to contact us should you have any other question in this matter.

Yours faithfully,

  
(TSE Yu-hing)  
for Director of Fire Services

TYH/jt



# ARCHITECTURAL SERVICES DEPARTMENT 建築署

QUEENSWAY GOVERNMENT OFFICES, 66 QUEENSWAY, HONG KONG. 香港金鐘道六十六號金鐘道政府合署  
FAX 852-2869 0289

Our Ref : ASD 16/92101/AML/APP  
Your Ref. : -----  
Tel. No. : 2867 3631  
Fax No. : 2877 0594

06 June 1997

Hilti (HK) Ltd  
17/F, Tower 6, China HK City,  
33 Canton Rd., TST

Dear Sirs,

**Architectural Services Department**  
**List of Acceptable Materials**  
**Hilti Firestop Products**  
**Ref. no. 0001P**

I am pleased to inform you that approval has been given to include the above product/material in this Department's List of Acceptable Materials. Initially, this listing is for a probationary status and this will be reviewed after the submission of satisfactory performance reports on completion of projects undertaken by this Department where your product has been used.

The Architectural Services Department List of Acceptable Materials is a restricted internal document. This letter should not be used for commercial or marketing purposes and failure to comply with this may result in the removal of the product from the List.

Yours faithfully,

( W.M. TANG )  
Technical Secretary/2  
for Chief Architect/ Central Management Branch  
Architectural Services Department

Attn. : To whom it may concern

Date : 26 September 2023  
Ref. : 103/FP/DY/23

Subject : Country of Origin- Hilti CP 611A Firestop Intumescent Sealant

Dear Sir / Madam,

Enclosed please find the information of Hilti CP 611A Firestop Intumescent Sealant.

Brand Name : Hilti

Model Name : Hilti CP 611A Firestop Intumescent Sealant

Manufacturer : Hilti Corporation

Address of Manufacturer : FL-9494, Principality of Liechtenstein.

Manufacturer Contact Person : Dennis Yeung

Supplier : Hilti (Hong Kong) Ltd

Address of Supplier : 701-704, 7/F, Tower A, Manulife Financial Centre,  
223 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong

Supplier Contact Person : Dennis Yeung (+852 9723 4621)

Country of Origin : Germany

Should you have further questions, please do not hesitate to contact our Technical Representatives, Customer Service Hotline at 8228-8118, or email us at [hksales@hilti.com](mailto:hksales@hilti.com).

Yours faithfully,



Dennis Yeung  
Head of Product Leadership Strategy, F&P



July 30, 2014

To Whom It May Concern:

Re: Hilti Intumescent Firestop Sealant CP 611A – LEED Info.

- The Hilti Intumescent Firestop Sealant CP 611A is manufactured in Germany.
- The package of Hilti Intumescent Firestop Sealant CP 611A can be completely recycled.
- There is no recycled content in Hilti Intumescent Firestop Sealant CP 611A and it cannot be recycled.
- The Hilti Intumescent Firestop Sealant CP 611A does not share any rapidly renewable materials.
- The VOC content of Hilti Intumescent Firestop Sealant CP 611A is 56 g/l.

If you would like to know more about Hilti solutions for LEED buildings or should you have any further question please feel free to contact me at my email or mobile number as shown below.

Sincerely,

Andrew Lau

Product Manager - Firestop

Hilti (Hong Kong) Limited

Email: [andrew.lau@hilti.com](mailto:andrew.lau@hilti.com)

Mobile: (852) 9843-6291

**Hilti (Hong Kong) Ltd.**  
701-704 | Tower A | Manulife Financial Centre  
223 Wai Yip Street | Kwun Tong

Kowloon | Hong Kong

**P** +852-8228 8118 | **F** +852-2954 1751

**[www.hilti.com.hk](http://www.hilti.com.hk)**

**To whom it may concern**

Date: 22<sup>nd</sup> April 2016

Dear Sir / Madam,

**Subject: Hilti Firestop Products non-CFC and Ozone Confirmation**

Referring to your enquiry about the captioned subject, please be advised that:

Hilti firestop products, CP611A Intumescent Mastic is free of CFC, HCFC nor other ozone depletion elements.

CFC, HCFC and ozone depletion elements were not used during the product process neither.

Should you have further questions, please do not hesitate to contact our Technical Representatives or Customer Service Hotline at 8228-8118.

Yours sincerely,



Andrew Lau  
Product Manger

# CFS-IS; CP 611A

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

Date of issue: 14/02/2018

Version: 11.0

Revision date: 14/02/2018

Supersedes: 12/11/2015

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form	Mixture
Product name	CFS-IS; CP 611A
Product code	BU Fire Protection



Product group	Trade product
---------------	---------------

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture	Firestop intumescent sealant
------------------------------	------------------------------

#### 1.3. Details of the supplier of the safety data sheet

Hilti (Hong Kong) Ltd.  
701-704, 7/F, Tower A, Manulife Financial Centre  
223 Wai Yip Street, Kwun Tong  
Kowloon - Hong Kong  
T +852 27734 700  
[hksales@hilti.com](mailto:hksales@hilti.com)

#### Supplier

Hilti (Hong Kong) Ltd.  
701-704, 7/F, Tower A, Manulife Financial Centre  
223 Wai Yip Street, Kwun Tong  
Kowloon - Hong Kong  
T +852 27734 700  
[hksales@hilti.com](mailto:hksales@hilti.com)

#### Department issuing data specification sheet

Hilti AG  
Feldkircherstraße 100  
9494 Schaan - Liechtenstein  
T +423 234 2111  
[chemicals.hse@hilti.com](mailto:chemicals.hse@hilti.com)

#### 1.4. Emergency telephone number

Emergency number	Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +852 27734 700
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### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to the United Nations GHS (Rev. 4, 2011)

Skin Sens. 1	H317
Repr. 2	H361
Aquatic Acute 2	H401
Aquatic Chronic 3	H412

Full text of hazard classes and H-statements : see section 16

# CFS-IS; CP 611A

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

### 2.2. Label elements

#### Labelling according to the United Nations GHS (Rev. 4, 2011)

Hazard pictograms (GHS-UN)



GHS07

GHS08

Signal word (GHS-UN)

Warning

Hazardous ingredients

polypropylene glycol alkyl phenyl ether; Zinc borate

Hazard statements (GHS-UN)

H317 - May cause an allergic skin reaction.  
 H361 - Suspected of damaging fertility or the unborn child.  
 H401 - Toxic to aquatic life  
 H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (GHS-UN)

P280 - Wear eye protection, protective clothing, protective gloves.  
 P308+P313 - IF exposed or concerned: Get medical advice, medical attention.  
 P333+P313 - If skin irritation or rash occurs: Get medical advice, medical attention.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
Zinc borate	(CAS-No.) 138265-88-0	5 - 10	Repr. 2, H361 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
polypropylene glycol alkyl phenyl ether	(CAS-No.) 9064-13-5	2.5 - 5	Skin Sens. 1B, H317

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation	Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	Get medical advice/attention if you feel unwell.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact	May cause an allergic skin reaction.
-------------------------------------	--------------------------------------



# CFS-IS; CP 611A

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media Water spray. Dry powder. Foam. Carbon dioxide.

### 5.2. Special hazards arising from the substance or mixture

No additional information available

### 5.3. Advice for firefighters

Protection during firefighting Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

Protective equipment For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up Mechanically recover the product.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling Wear personal protective equipment.  
Hygiene measures Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.  
Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Keep cool. Store in a dry place.  
Storage temperature 5 - 25 °C

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Additional information The product has a pasty consistency. Exposure limit values for respirable dusts are not relevant for this product.

### 8.2. Appropriate engineering controls

No additional information available

# CFS-IS; CP 611A

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

### 8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection Protective gloves. EN 374

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	1 (> 10 minutes)	>0.4		EN 374

Eye protection

Type	Use	Characteristics	Standard
Safety glasses			EN 166, EN 170

Skin and body protection Wear suitable protective clothing



### 8.4. Exposure limit values for the other components

No additional information available

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Pasty.
Molecular mass	Not determined
Colour	dark grey.
Odour	characteristic.
Odour threshold	Not determined
pH	8.5
Relative evaporation rate (butylacetate=1)	No data available
Melting point	Not applicable
Freezing point	No data available
Boiling point	No data available
Flash point	Not applicable
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	Not applicable
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	1.4 g/cm <sup>3</sup>
Solubility	No data available
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	No data available

# CFS-IS; CP 611A

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) Not classified

Acute toxicity (dermal) Not classified

Acute toxicity (inhalation) Not classified

<b>Zinc borate (138265-88-0)</b>	
LD50 oral rat	10000 mg/kg (Rat)
LD50 dermal rabbit	10000 mg/kg (Rabbit)

Skin corrosion/irritation Not classified

pH: 8.5

Serious eye damage/irritation Not classified

pH: 8.5

Respiratory or skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity Not classified

Carcinogenicity Not classified

Reproductive toxicity Suspected of damaging fertility or the unborn child.

STOT-single exposure Not classified

STOT-repeated exposure Not classified

Aspiration hazard Not classified

# CFS-IS; CP 611A

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

### SECTION 12: Ecological information

#### 12.1. Toxicity

Acute aquatic toxicity Toxic to aquatic life.  
Chronic aquatic toxicity Harmful to aquatic life with long lasting effects.

<b>Zinc borate (138265-88-0)</b>	
LC50 fish 1	2.4 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)

#### 12.2. Persistence and degradability

<b>Zinc borate (138265-88-0)</b>	
Persistence and degradability	Biodegradability: not applicable. Adsorbs into the soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Ozone Not classified  
Other adverse effects No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Product/Packaging disposal recommendations Dispose in a safe manner in accordance with local/national regulations.

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID
<b>14.1. UN number</b>			
Not regulated for transport			
<b>14.2. UN proper shipping name</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>			
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>			
Dangerous for the environment :	Dangerous for the environment :	Dangerous for the environment :	Dangerous for the environment :

# CFS-IS; CP 611A

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

ADR	IMDG	IATA	RID
No	No Marine pollutant : No	No	No
No supplementary information available			

### 14.6. Special precautions for user

**- Overland transport**

**- Transport by sea**

No data available

**- Air transport**

No data available

**- Rail transport**

Carriage prohibited (RID) No

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

No additional information available

## SECTION 16: Other information

SDS Major/Minor	None
Date of issue	14/02/2018
Revision date	14/02/2018
Supersedes	12/11/2015

Indication of changes:

Section	Changed item	Change	Comments
2.1		Modified	
12.		Modified	

Full text of H-statements:

H317	May cause an allergic skin reaction.
H361	Suspected of damaging fertility or the unborn child.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

SDS\_UN\_Hilti

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*

