

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-16/0811
of 2 March 2017

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the
European Technical Assessment:

Deutsches Institut für Bautechnik

Trade name of the construction product

Interdens® Type 5,
Interdens® Type 15,
Interdens® Type 36

Product family
to which the construction product belongs

Intumescent products for fire sealing and fire stopping
purposes

Manufacturer

BASF Wolman GmbH
Dr.-Wolman-Straße 31-33
76547 Sinzheim
DEUTSCHLAND

Manufacturing plant

A¹

This European Technical Assessment
contains

6 pages inclusive 1 annex which forms an integral part of
this assessment

This European Technical Assessment is
issued in accordance with Regulation (EU)
No 305/2011, on the basis of

European Assessment Document (EAD)
350005-00-1104

¹ Address known at DIBt

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Specific Part

1 Technical description of the product

Object of this European Technical Assessment (ETA) are the intumescent construction products "Interdens® Type 5", "Interdens® Type 15" and "Interdens® Type 36".

This ETA also applies to the products "Interdens® Type 5", "Interdens® Type 15" and "Interdens® Type 36" in form of cuts (e.g. strips) and blanked pads as well as to the modifications with self-adhesive tape (SA)² on one side.

In case of fire, exposed to high temperatures, the intumescent products expand and generate foam. This foam seals joints and gaps, closes voids and openings. Thus, the foam restricts the passage and the spread of heat, smoke, flames or any combination of these.

The technical characteristics relevant for fire sealing and fire stopping effects of the construction products "Interdens® Type 5", "Interdens® Type 15" and "Interdens® Type 36" are given in Annex 1.

The construction products "Interdens® Type 5", "Interdens® Type 15" and "Interdens® Type 36" are semi-rigid intumescent products of white, red, brown or black colour, produced in form of panels. The products consist essentially of intumescent substances, binder and a glass-fibre inlay.

The construction products "Interdens® Type 5", "Interdens® Type 15" and "Interdens® Type 36" differ in thickness. They are produced in a factory of the standard thicknesses 0,6 mm, 1,0 mm and 2,0 mm (tolerance $\pm 0,2$ mm for each), and preferably with a standard width of 1000 mm and a standard length of 2040 mm. Bigger thicknesses are possible by a factory-provided combination of the three products.

Other dimensions, cuts and pads are possible.

The construction products "Interdens® Type 5", "Interdens® Type 15" and "Interdens® Type 36" may be equipped with a self-adhesive tape on one side for fixing the product on the substrate or can be fastened mechanically or by using a suitable adhesive, which is not part of this ETA.

The construction products "Interdens® Type 5", "Interdens® Type 15" and "Interdens® Type 36" may be cut if necessary.

2 Specification of the intended use in accordance with the applicable European Assessment Document (EAD)

The construction products "Interdens® Type 5", "Interdens® Type 15" and "Interdens® Type 36" are assessed on the basis of EAD 350005-00-1104³ as intumescent products for fire sealing and fire stopping purposes without defined final intended use (IU 1).

The construction products "Interdens® Type 5", "Interdens® Type 15", "Interdens® Type 36" and its modifications with self-adhesive tape are intended to be used as an essential component in construction products, construction elements, kits and special assemblies which need to meet requirements concerning the safety in case of fire.

In case of fire, the products delay the heat transfer through fire resistant construction products and construction elements by expanding under the impact of high temperatures and thus restricting the spread of fire.

The performance given in section 3 is only valid, if the construction products "Interdens® Type 5", "Interdens® Type 15" and "Interdens® Type 36" in use consider the instructions and the conditions stated in section 3.3.

² Type, manufacturer and specific parameters deposited with DIBt
³ Official Journal of the EU N° C 378/02 of 13/11/2015

The test and assessment methods on which this ETA is based, lead to the assumption of working life of the intumescent construction products "Interdens® Type 5", "Interdens® Type 15" and "Interdens® Type 36" of at least 10 years⁴ in final use.

The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

3 Performance of the product and references to the methods used for this assessment

3.1 Safety in case of fire (BWR 2)

3.1.1 Reaction to fire

Essential characteristic	Performance
Reaction to fire	Class E in accordance with EN 13501-1

The intumescent construction products "Interdens® Type 5", "Interdens® Type 15" and "Interdens® Type 36" with/without a self-adhesive tape meet the reaction to fire requirements of class E in accordance with EN 13501-1⁵.

3.1.2 Resistance to fire

The performance "resistance to fire" shall be determined separately for every final use and shall be classified, if required for the construction element concerned.

3.2 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Content and release of dangerous substances	No dangerous substances ⁶

The detailed chemical composition⁷ of the intumescent construction products "Interdens® Type 5", "Interdens® Type 15" and "Interdens® Type 36" was assessed by DIBt and is deposited with DIBt.

3.3 General aspects

Durability testing shall be an integral part of assessing the basic works and performance requirements. The following specific provisions for use shall be complied with to ensure the durability of the performance.

The testing and the assessment of the product performance were carried out for environmental conditions of type Z₂ - product intended for use at dry internal conditions without frost (relative humidity between 50 % and 85 % and temperatures between +5 °C ±5 °C and +35 °C ±5 °C) - in accordance with EOTA Technical Report 024⁸, section 4.2.7.

Result:

The intumescent construction products "Interdens® Type 5", "Interdens® Type 15" and "Interdens® Type 36" can be used under use conditions of type Z₂ without having to fear essential changes in the relevant fire sealing and fire stopping properties and the resulting performance.

⁴ Results of long-term aging available (10 years defined exposure)

⁵ EN 13501-1 Fire classification of construction products and building elements; Part 1: Classification using test data from reaction to fire tests; and A1:2009

⁶ In accordance with the Regulation (EC) No 1272/2008 of the European Parliament and the Council of 16 December 2008 (published in the OJ of the EU N° L353 of 31/12/2008)

⁷ Schriftliche Hinterlegung vom 09.12.2016

⁸ EOTA TR 024 Characterisation, Aspects of Durability and Factory Production Control for Reactive Materials, Components and products; amended version July 2009

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with the European Assessment Document EAD No 350005-00-1104 the Decision of the commission N° 1999/454/EC of 22 June 1999 (OJ of the EU L 178 of 14 July 1999, p 42), amended by EC Decision 2001/596/EC of 8 January 2001 (OJ of the EU L 209 of 2 August 2001, p 33) is the legal basis for AVCP.

So system 1 applies for the assessment and verification of constancy of performance (AVCP). See Annex V in conjunction with Article 65 (2) of the Regulation (EU) N° 305/2011 and the following table:

Product	Intended use	Characteristic	System
"Interdens® Type 5", "Interdens® Type 15", "Interdens® Type 36"	Components effective in view of safety in case of fire (BWR 2) used in construction products, construction elements, kits and special assemblies	reaction to fire, properties relevant for the fire sealing and fire stopping effect	1

5 Technical details necessary for the implementation of the procedure for assessment and verification of constancy of performance (AVCP) system 1, as provided for in the applicable European Assessment Document

The technical details necessary for the implementation of the system for assessment and verification of constancy of performance are laid down in the control plan (confidential part of this ETA) deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 2 March 2017 by Deutsches Institut für Bautechnik

Prof. Gunter Hoppe
Head of Department

beglaubigt:
Dr.-Ing. Dierke

**CHARACTERISTICS OF THE CONSTRUCTION PRODUCT RELEVANT FOR THE
FIRE SEALING AND FIRE STOPPING EFFECTS OF "INTERDENS® TYPE 5",
"INTERDENS® TYPE 15" AND "INTERDENS® TYPE 36"**

Characteristic	Test method ⁹	Range of determined values and tolerances
Thickness	EOTA TR 024 ⁸ , cl. 3.1.2	0,6 mm to 2,0 mm (tolerance for each nominal thickness $\pm 0,2$ mm)
Expansion ratio	EOTA TR 024 ⁸ , cl. 3.1.11 Method 2 at 350 °C for 20 minutes	25,0 to 95,0

The intumescent products "Interdens® Type 5", "Interdens® Type 15" and "Interdens® Type 36" do generate not notable expansion pressure.

The intumescent products "Interdens® Type 5", "Interdens® Type 15" and "Interdens® Type 36" react in two steps:
phase 1 starts at ca. 150 °C and
phase 2 starts at ca. 300 °C.

⁹ Details of test method are deposited with DIBt.