

Test Report

Name of client: Kvadrat A/S
Product name: Tonight, 70% recycled polyester FR, 30% polyester FR
File no.: PFA12256A **Revision no.:** 0
Date: 2024-08-27
Pages: 6 **Encl.:** 6
Ref: MRD / MPA

Client information

Client: Kvadrat A/S

Address: Lundbergsvej 10

8400 Ebeltoft

Denmark

The results relate only to the items tested. The report should only be reproduced in extenso - in extracts only with a written agreement with this institute.

INDICATIVE TEST

1. Material

Fabric

Trade name

Tonight

2. Manufacturer

The client is the manufacturer.

3. Nature of test

By request of the client dated 2024-06-17, the product has been subjected to an indicative test procedure of EN 13823:2020 + A1:2022 and EN ISO 11925-2: 2020.

4. Sample

On 2024-06-24 DBI - Danish Institute of Fire and Security Technology received the following sample:

1 role of Tonight, 70% recycled polyester FR, 30% polyester FR with dimensions 6000 x 2950 x 0.5 mm (Length x Width x Thickness).

The weight per unit area at 20°C (undried) on a sample measuring 1500 x 1000 x 0.57 mm (L x W x T): 0.33 kg/m² at the state of receipt determined by weight and measures of the sample.

The following information was given by the client:

See enclosure 1.

One test specimen was prepared from the sample to EN 13823 and sample was also used for EN ISO 11925.

5. Mounting of specimen for Single Burning Item test

A standard mounting of specimen was carried out in accordance with EN 13823 as follows:

Thickness of

Fabric 0.57 mm

Mounting: Standard mounting option b) in clause 5.2.2 of EN 13823.

Substrate: Free standing

Fixing means: Staples

Joints: Mounted without joints

The specimen was assembled by DBI

6. Conditioning

On 2024-06-26 the specimens were stored in a conditioning room with an atmosphere of relative humidity of $50 \pm 5 \%$ and a temperature of $23 \pm 2 \text{ }^\circ\text{C}$. The test specimens were kept in this room until the tests were performed.

7. Test method

The test was performed in accordance with:

EN 13823:2020 +A1:2022 Reaction to fire tests for building products - Building products excluding flooring exposed to the thermal attack by a single burning item

EN ISO 11925-2:2020 Reactions to fire test – Ignitability of products subjected to direct impingement of flame Part 2: Single-flame source test.

8. Test results

8.1 EN 13823

Date of test: 2024-07-12

One test was performed.

During the test, the following measurements were made: Volume flow in the exhaust duct, production of carbon dioxide, concentration of oxygen, and production of light-obscuring smoke. Based on these measurements the rate of heat release and the rate of smoke production were calculated.

The graphs, enclosures 2-4, show for the test performed:

Enclosure 2

- Average Heat Release Rate $\text{HRR}_{\text{av}}(t)$
- Total Heat Release THR (t)

Enclosure 3

- Average Heat Release Rate per unit time $[1000 \times \text{HRR}_{\text{av}}(t)/(t-300)]$
- $\text{FIGRA}_{0,2\text{MJ}}$ -values

Enclosure 4

- $\text{FIGRA}_{0,4\text{MJ}}$ -values
- Smoke Production Rate $\text{SPR}_{\text{av}}(t)$

Enclosure 5

- Total Smoke Production TSP(t)
- Smoke Production Rate per unit time $[10000 \times \text{SPR}_{\text{av}}(t)/(t-300)]$

The test results are shown in the following table

	Test No. 1
FIGRA _{0.2 MJ} [W/s]	0.0
FIGRA _{0.4 MJ} [W/s]	0.0
THR _{600s} [MJ]	0.13
SMOGR _A [m ² /s ²]	0.0
TSP _{600 s} [m ²]	5.5
FDP _{f≤10s} [yes/no]	No
FDP _{f>10s} [yes/no]	No
LFS < edge of specimen [yes/no]	Yes

- FDP_{f≤10s}: Flaming Droplets/Particles burning less than 10 seconds.
- FDP_{f>10s}: Flaming Droplets/Particles burning more than 10 seconds.
- LFS: Lateral Flame Spread on the long wing of the test specimen.

No events of importance occurred during the test.

Photographs of the test specimen show the effect of the damages, see enclosure 5

8.2 EN ISO 11925-2

Date of test: 2024-08-16

Flame application time: 30 sec.

Test running time: 60 sec.

Edge flame impingement

Specimen No.	Ignition (yes/no)	Flame spread > 150 mm	Time (sec) to reach 150 mm mark	Ignition of filter paper (yes/no)
1L	Yes	No	-	No
2C	Yes	No	-	No

L: Lengthwise C: Crosswise

Surface flame impingement

Specimen No.	Ignition (yes/no)	Flame spread > 150 mm	Time (sec) to reach 150 mm mark	Ignition of filter paper (yes/no)
1L	Yes	No	-	No
2C	Yes	No	-	No

L: Lengthwise C: Crosswise

9. Remark


The test results relate to the behavior of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

The product designated Tonight, 70% recycled polyester FR, 30% polyester FR indicates fulfils the criteria for a class B-s1,d0 product according to EN 13501-1:2018

This report cannot be used for classification purpose or for approval by the authorities.



Mathias Revall Delcomyn
BTecMan & Mar.Eng



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Tonight

Lightfastness

Note 4-7 ISO 105-B02

Solar optical properties (EN 14500:2021)

Colour 0100:

Visual light transmission 0%

Solar reflection 35%

Absorption

150 mm airgap

0.65/Class C (flat), 1.00/Class A (waved) EN ISO 354

100 mm airgap

0.55/Class D (flat), 0.90/Class A (waved) EN ISO 354

Airflow

755 Pa s/m EN 29053

Flame resistance

AS/NZS 1530.3

BS 5867 part 2 type B

DIN 4102 B1

EN 13 773 class 1

JIS L 1091 A-1-D

NF P 92 507 M1

NFPA 701

SN 198 898 5.2

UNI 9177 Classe 1

Tonight

Design: Kinnasand

Type: Woven blackout curtain

Composition: 70% recycled polyester FR, 30% polyester FR

Yarn type: Filament

Binding: Jacquard

Width: Approx. 295 cm, 116 inches

Weight: Approx. 1000 g/lin.m, 32 oz/ly

Repeat: None

Colour difference may occur

Cleaning: Washing at max. 60°C.

Drip drying.

Shrinkage approx. 2% when washed at 60°C.

Ironing might be necessary.

Disinfection, see kvadrat.dk

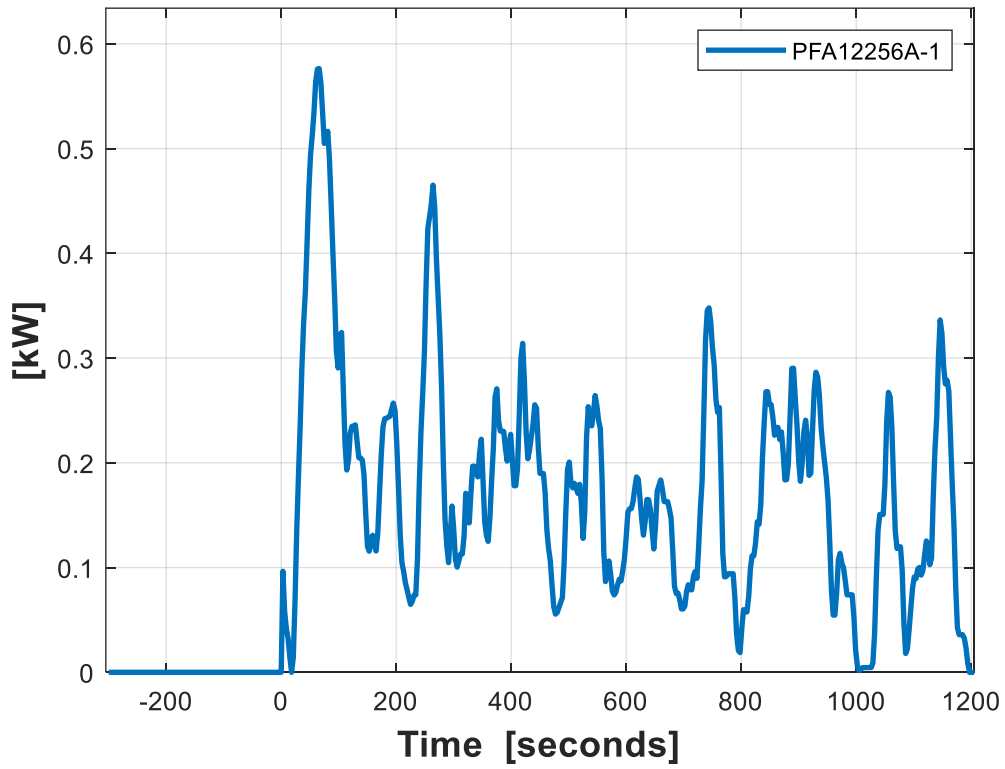
More info: Care and maintenance kvadrat.dk



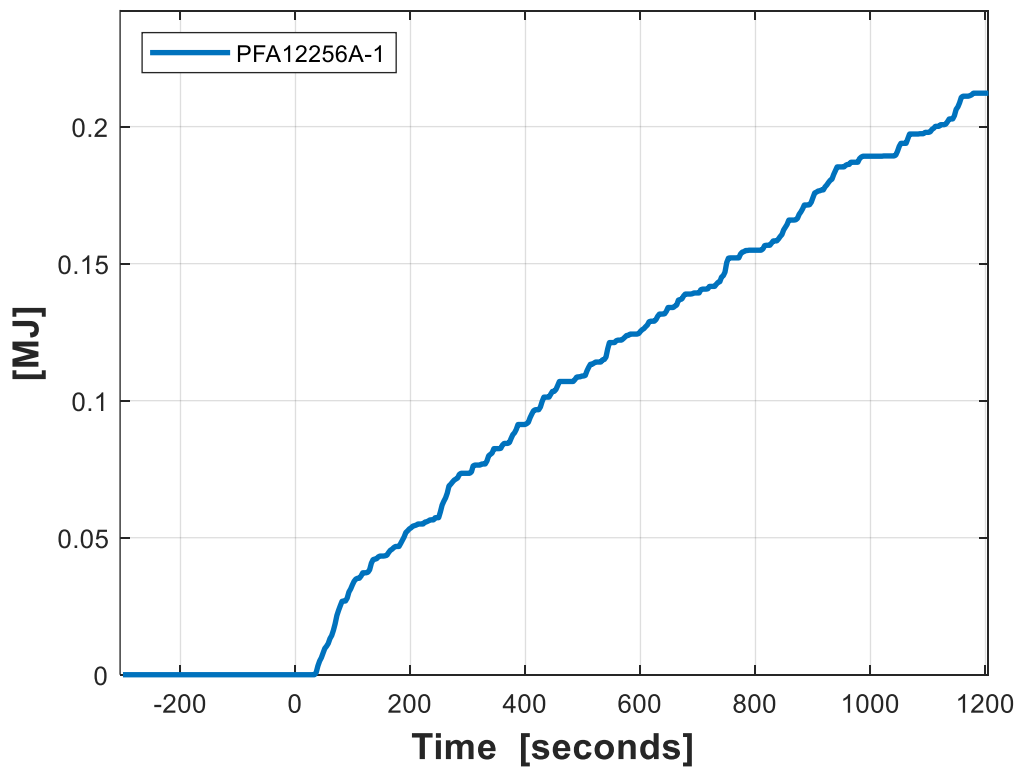
10^{year}
warranty

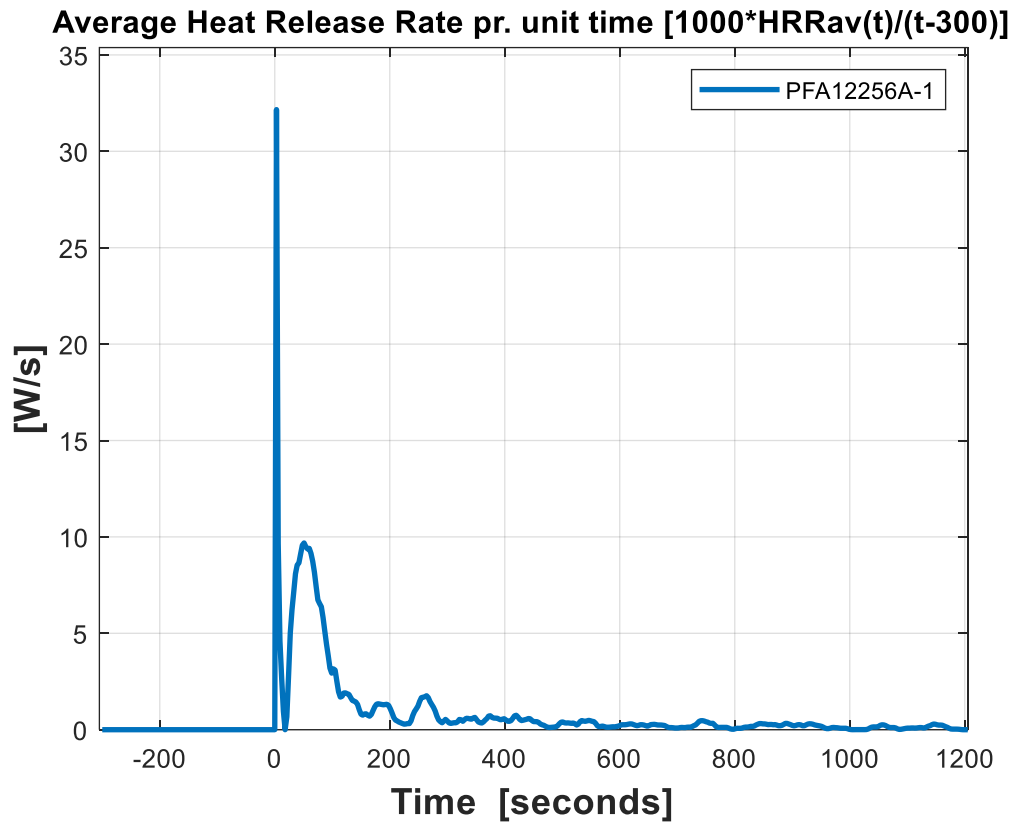


Average Heat Release Rate HRRav(t)

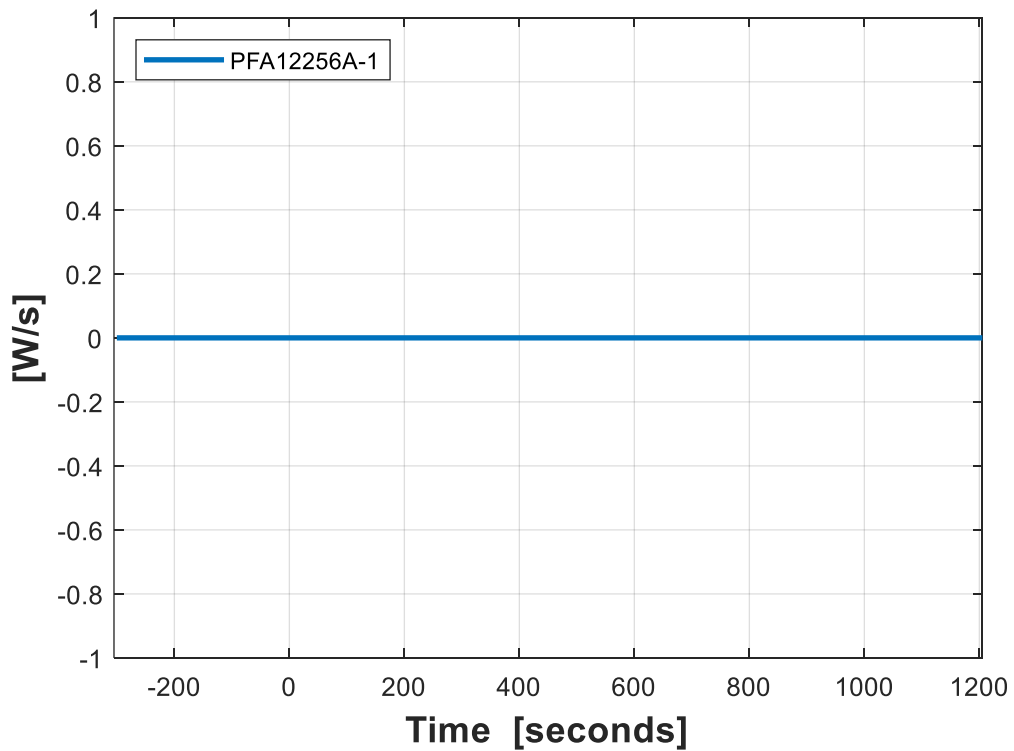


Total Heat Release THR(t)

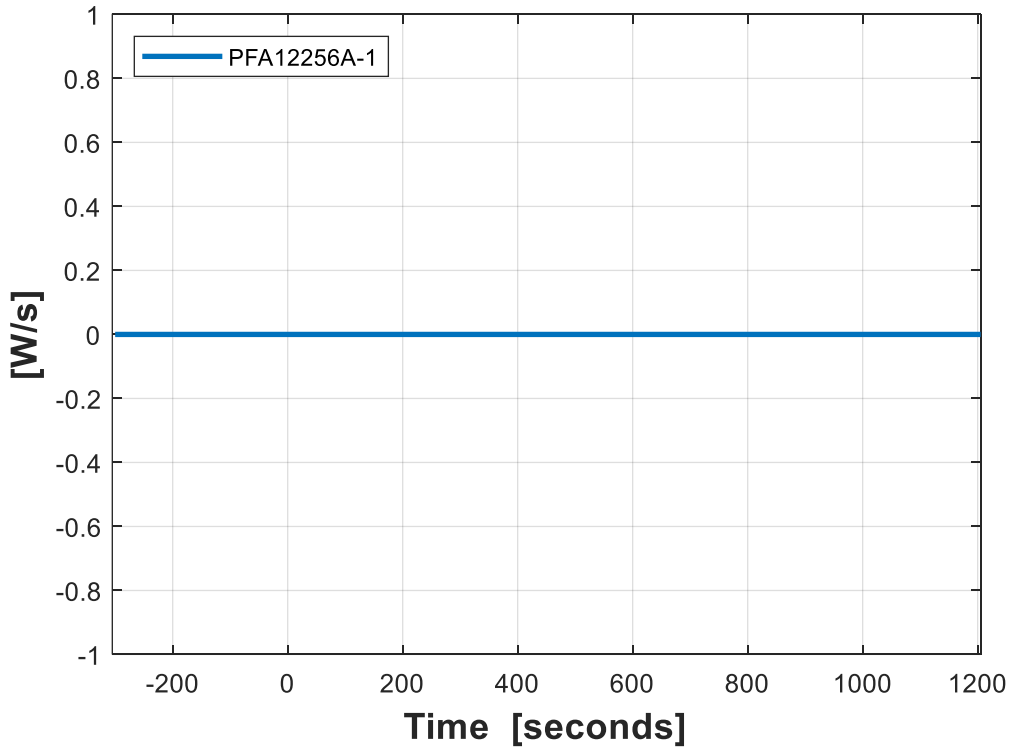




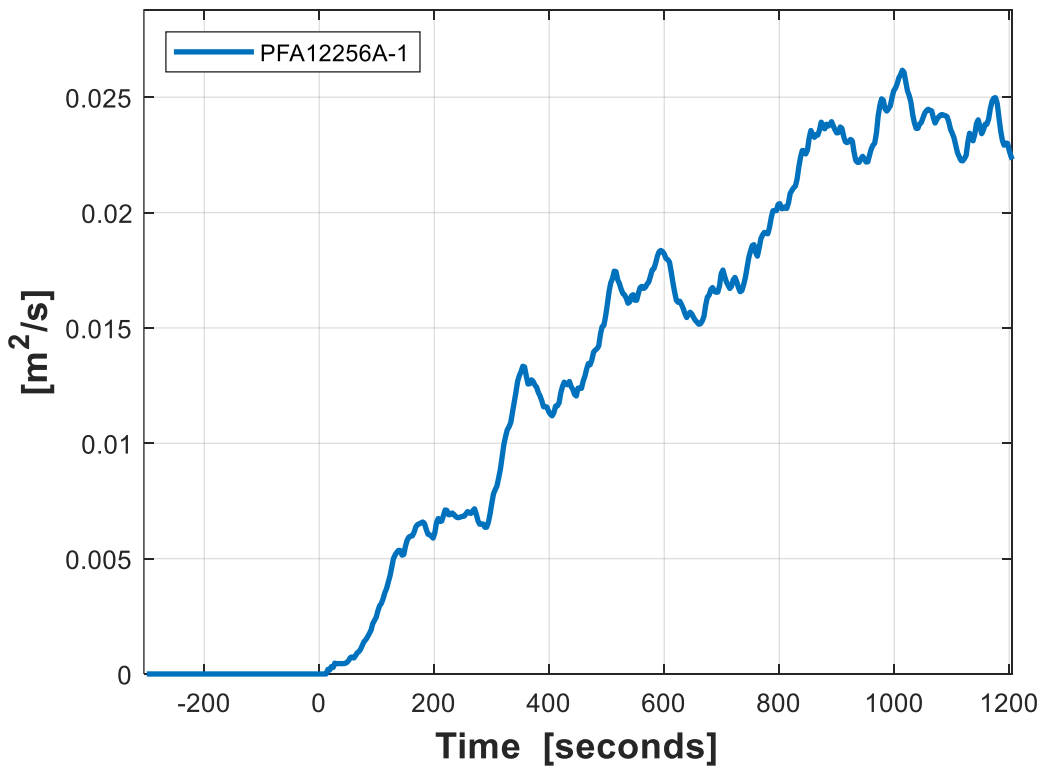
FIGRA_{0.2MJ}-values



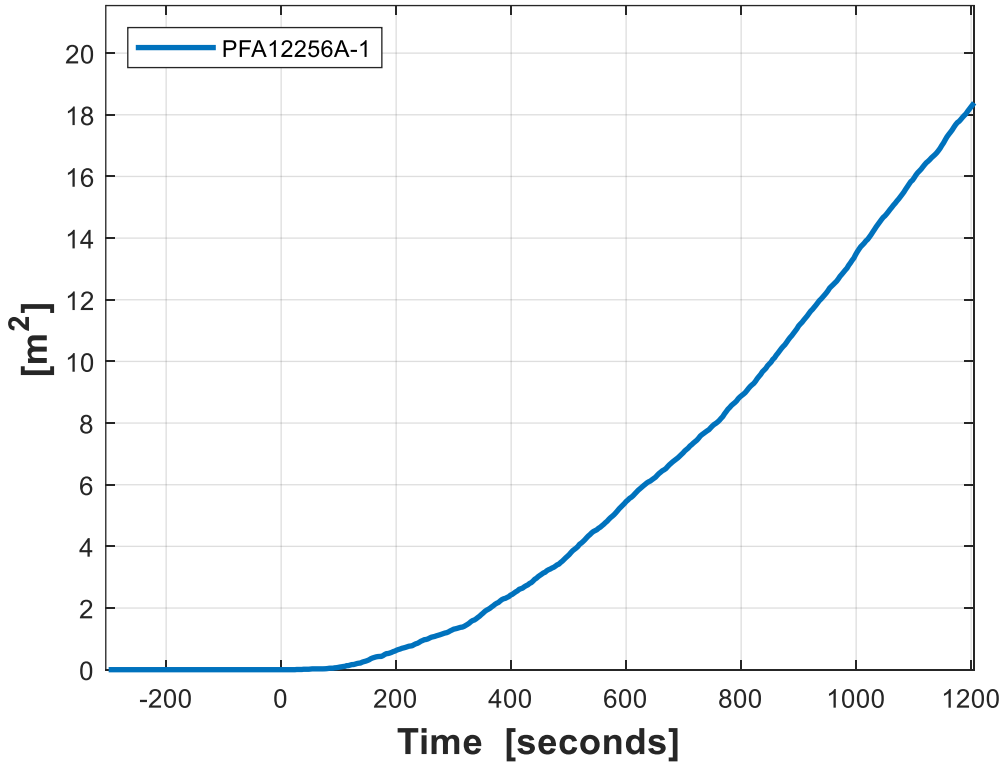
FIGRA_{0.4MJ}-values



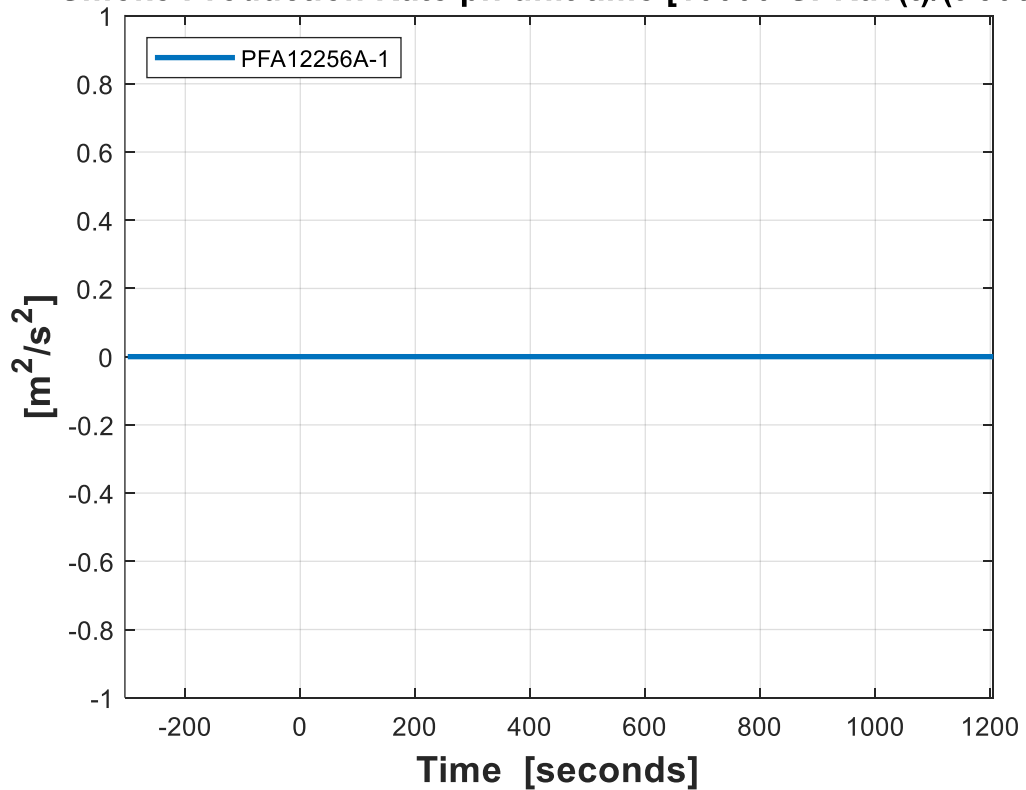
Smoke Production Rate SPRav(t)



Total Smoke Production TSP(t)



Smoke Production Rate pr. unit time [10000*SPRav(t)/(t-300)]



TEST NO. 1

