

# LATE POOL FIRE REPORT

Study Folder: TOP EVENT 23

Unique Audit Number:

534

PHAST v6.00



## TOP EVENT 23



### Propane spill out

#### LPG tanks

##### Base Case

##### Data



Weather: Category 2/F

Speed: 2,00 m/s

Stability: F

### Flame Data

TOP EVENT 23\Propane spill out\LPG tanks

Correlation Type

Thomas / Johnson

#### User-Defined Quantities

Material	PROPANE
Ambient Temperature	9,85 C
Ambient Relative Humidity	0,70 fraction
Ambient Wind Speed	2,00 m/s
Pool Diameter	10,67 m
Surface Type	Land
Elevation	0,00 m
Maximum Exposure Duration	20,00 s

#### Input and/or Output Quantities

##### Input

##### Output

Flame Length	25,98	m
Flame Angle	34,06	degrees
Flame Emissive Power	156,69	kW/m2

#### Flame Co-ordinates

X	Z	R	Phi
m	m	m	degrees
0,00	0,00	5,33	0,00
14,55	21,52	5,33	0,00
14,55	21,52	0,00	0,00
0,00	0,00	5,31	0,00
20,17	16,25	5,31	0,00
20,17	16,25	0,00	0,00



**Radiation Ellipse**

**User-Defined Quantities**

Observer Inclination	Variable	degrees
Exposure Duration	20,00	s

**Calculated Quantities**

<b>Incident Radiation Level:</b>	<b>3,00</b>	<b>kW/m2</b>
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Lethality Level	n/a	percent
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View Factor	n/a	
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Total Radiation Received	60,00	kJ/m2
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Downwind semi-axis (A)	Not Reached	m
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Crosswind semi-axis (B)	Not Reached	m
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Offset Ratio (D)	Not Reached	
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Effect Distance	6,00	m
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Area	28,27	m2
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<b>Incident Radiation Level:</b>	<b>5,00</b>	<b>kW/m2</b>
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Lethality Level	n/a	percent
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View Factor	n/a	
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Total Radiation Received	100,00	kJ/m2
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Downwind semi-axis (A)	Not Reached	m
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Crosswind semi-axis (B)	Not Reached	m
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Offset Ratio (D)	Not Reached	
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Effect Distance	6,00	m
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Area	28,27	m2
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<b>Incident Radiation Level:</b>	<b>7,00</b>	<b>kW/m2</b>
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Lethality Level	n/a	percent
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View Factor	n/a	
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Total Radiation Received	140,00	kJ/m2
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Downwind semi-axis (A)	Not Reached	m
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Crosswind semi-axis (B)	Not Reached	m
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Offset Ratio (D)	Not Reached	
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Effect Distance	6,00	m
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Area	28,27	m2
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## Radiation Distance

### User-Defined Quantities

Maximum Distance	50,00	m
Angle from Wind Direction	0,00	degrees
Height above Origin	0,00	m
Observer Inclination	Variable	degrees
Observer Orientation	0,00	degrees

### Calculated Quantities

X Coordinates m	Y Coordinates m	Z Coordinates m	Incident Radiation kW/m2	Lethality Level percent	View Factor
0,00			156,69		
1,00			156,69		
2,00			156,69		
3,00			156,69		
4,00			156,69		
5,00			156,69		
6,00			98,11		
7,00			80,07		
8,00			69,42		
9,00			62,07		
10,00			56,23		
11,00			51,55		
12,00			47,23		
13,00			44,27		
14,00			41,75		
15,00			38,90		
16,00			36,49		
17,00			34,01		
18,00			32,00		
19,00			29,90		
20,00			28,09		
21,00			26,51		
22,00			24,90		
23,00			23,64		
24,00			22,22		
25,00			20,88		
26,00			19,68		
27,00			18,50		
28,00			17,40		
29,00			16,36		
30,00			15,23		
31,00			14,33		
32,00			13,49		
33,00			12,71		
34,00			11,98		
35,00			11,29		
36,00			10,65		

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X Coordinates m	Y Coordinates m	Z Coordinates m	Incident Radiation kW/m2	Lethality Level percent	View Factor
37,00			10,06		
38,00			9,50		
39,00			8,99		
40,00			8,50		
41,00			8,05		
42,00			7,63		
43,00			7,24		
44,00			6,87		
45,00			6,53		
46,00			6,21		
47,00			5,91		
48,00			5,63		
49,00			5,37		



**Weather:**

**Category 5/D**

**Speed:**

**5,00 m/s**

**Stability:**

**D**

## Flame Data

TOP EVENT 23\Propane spill out\LPG tanks

Correlation Type

Thomas / Johnson

## User-Defined Quantities

Material	PROPANE
Ambient Temperature	9,85 C
Ambient Relative Humidity	0,70 fraction
Ambient Wind Speed	5,00 m/s
Pool Diameter	10,62 m
Surface Type	Land
Elevation	0,00 m
Maximum Exposure Duration	20,00 s

## Input and/or Output Quantities

### Input

### Output

Flame Length	25,90 m
Flame Angle	51,14 degrees
Flame Emissive Power	156,64 kW/m2

## Flame Co-ordinates

X m	Z m	R m	Phi degrees
0,00	0,00	5,33	0,00
14,55	21,52	5,33	0,00
14,55	21,52	0,00	0,00
0,00	0,00	5,31	0,00
20,17	16,25	5,31	0,00
20,17	16,25	0,00	0,00



**Radiation Ellipse**

**User-Defined Quantities**

Observer Inclination	Variable	degrees
Exposure Duration	20,00	s

**Calculated Quantities**

<b>Incident Radiation Level:</b>	<b>3,00</b>	<b>kW/m2</b>
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Lethality Level	n/a	percent
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View Factor	n/a	
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Total Radiation Received	60,00	kJ/m2
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Downwind semi-axis (A)	Not Reached	m
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Crosswind semi-axis (B)	Not Reached	m
-------------------------	-------------	---

Offset Ratio (D)	Not Reached	
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Effect Distance	6,00	m
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Area	28,27	m2
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<b>Incident Radiation Level:</b>	<b>5,00</b>	<b>kW/m2</b>
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Lethality Level	n/a	percent
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View Factor	n/a	
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Total Radiation Received	100,00	kJ/m2
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Downwind semi-axis (A)	Not Reached	m
------------------------	-------------	---

Crosswind semi-axis (B)	Not Reached	m
-------------------------	-------------	---

Offset Ratio (D)	Not Reached	
------------------	-------------	--

Effect Distance	6,00	m
-----------------	------	---

Area	28,27	m2
------	-------	----

<b>Incident Radiation Level:</b>	<b>7,00</b>	<b>kW/m2</b>
----------------------------------	-------------	--------------

Lethality Level	n/a	percent
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View Factor	n/a	
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Total Radiation Received	140,00	kJ/m2
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Downwind semi-axis (A)	Not Reached	m
------------------------	-------------	---

Crosswind semi-axis (B)	Not Reached	m
-------------------------	-------------	---

Offset Ratio (D)	Not Reached	
------------------	-------------	--

Effect Distance	6,00	m
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Area	28,27	m2
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## Radiation Distance

### User-Defined Quantities

Maximum Distance	50,00	m
Angle from Wind Direction	0,00	degrees
Height above Origin	0,00	m
Observer Inclination	Variable	degrees
Observer Orientation	0,00	degrees

### Calculated Quantities

X Coordinates m	Y Coordinates m	Z Coordinates m	Incident Radiation kW/m2	Lethality Level percent	View Factor
0,00			156,64		
1,00			156,64		
2,00			156,64		
3,00			156,64		
4,00			156,64		
5,00			156,64		
6,00			101,31		
7,00			84,01		
8,00			73,57		
9,00			66,84		
10,00			60,86		
11,00			56,25		
12,00			52,83		
13,00			49,89		
14,00			46,54		
15,00			44,57		
16,00			43,07		
17,00			40,55		
18,00			39,78		
19,00			39,48		
20,00			37,56		
21,00			35,71		
22,00			33,88		
23,00			31,86		
24,00			30,07		
25,00			28,15		
26,00			26,40		
27,00			24,71		
28,00			23,07		
29,00			21,50		
30,00			20,07		
31,00			18,66		
32,00			17,33		
33,00			16,08		
34,00			15,06		
35,00			13,98		
36,00			12,99		

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X Coordinates m	Y Coordinates m	Z Coordinates m	Incident Radiation kW/m2	Lethality Level percent	View Factor
37,00			12,07		
38,00			11,19		
39,00			10,42		
40,00			9,71		
41,00			9,06		
42,00			8,47		
43,00			7,93		
44,00			7,43		
45,00			6,97		
46,00			6,55		
47,00			6,17		
48,00			5,81		
49,00			5,48		