

# POOL FIRE REPORT

Unique Audit Number:

534



Study Folder: TOP EVENT 23

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

TOP EVENT 23\Propane spill out\LPG tanks

#### Flame Data

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	32,18 m
Surface Type	Land
Elevation	0,00 m
Maximum Exposure Duration	20,00 s

#### Input and/or Output Quantities

##### Input

##### Output

Flame Length	56,13	m
Flame Angle	27,06	degrees
Flame Emissive Power	160,00	kW/m2

#### Flame Co-ordinates

<b>X</b>	<b>Z</b>	<b>R</b>	<b>Phi</b>
m	m	m	degrees
0,00	0,00	16,09	0,00
25,54	49,98	16,09	0,00
25,54	49,98	0,00	0,00

# POOL FIRE REPORT

Study Folder: TOP EVENT 23

Unique Audit Number:

534



PHAST v6.00

## 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>	kW/m2
----------------------------------	-------------	-------

Lethality Level	n/a	percent
View Factor	n/a	
Total Radiation Received	60,00	kJ/m2

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>5,00</b>	kW/m2
----------------------------------	-------------	-------

Lethality Level	n/a	percent
View Factor	n/a	
Total Radiation Received	100,00	kJ/m2

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>	kW/m2
----------------------------------	-------------	-------

Lethality Level	n/a	percent
View Factor	n/a	
Total Radiation Received	140,00	kJ/m2

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

# POOL FIRE REPORT

Study Folder: TOP EVENT 23

Unique Audit Number:

534



PHAST v6.00

## 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			160,00		
1,00			160,00		
2,00			160,00		
3,00			160,00		
4,00			160,00		
5,00			160,00		
6,00			160,00		
7,00			160,00		
8,00			160,00		
9,00			160,00		
10,00			160,00		
11,00			160,00		
12,00			160,00		
13,00			160,00		
14,00			160,00		
15,00			160,00		
16,00			137,99		
17,00			108,95		
18,00			94,97		
19,00			87,62		
20,00			82,06		
21,00			77,27		
22,00			73,52		
23,00			69,98		
24,00			67,22		
25,00			64,44		
26,00			61,84		
27,00			59,47		
28,00			57,30		
29,00			55,26		
30,00			53,34		
31,00			51,55		
32,00			49,84		
33,00			48,23		
34,00			46,70		
35,00			45,26		
36,00			43,88		

# POOL FIRE REPORT

Unique Audit Number:

534



Study Folder: TOP EVENT 23

PHAST v6.00

X Coordinates m	Y Coordinates m	Z Coordinates m	Incident Radiation kW/m2	Lethality Level percent	View Factor
37,00			42,55		
38,00			41,30		
39,00			40,10		
40,00			38,85		
41,00			37,75		
42,00			36,69		
43,00			35,46		
44,00			34,48		
45,00			33,53		
46,00			32,62		
47,00			31,48		
48,00			30,60		
49,00			29,75		

Weather: Category 5/DSpeed: 5,00 m/sStability: D

TOP EVENT 23\Propane spill out\LPG tanks

## Flame Data

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	32,18 m
Surface Type	Land
Elevation	0,00 m
Maximum Exposure Duration	20,00 s

## Input and/or Output Quantities

Input

Output

Flame Length	56,13 m
Flame Angle	44,66 degrees
Flame Emissive Power	160,00 kW/m2

## Flame Co-ordinates

X m	Z m	R m	Phi degrees
0,00	0,00	16,09	0,00
39,45	39,92	16,09	0,00
39,45	39,92	0,00	0,00

# POOL FIRE REPORT

Study Folder: TOP EVENT 23

Unique Audit Number:

534



PHAST v6.00

## 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>
----------------------------------	-------------	--------------

Lethality Level	n/a	percent
View Factor	n/a	
Total Radiation Received	60,00	kJ/m2

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>5,00</b>	<b>kW/m2</b>
----------------------------------	-------------	--------------

Lethality Level	n/a	percent
View Factor	n/a	
Total Radiation Received	100,00	kJ/m2

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
View Factor	n/a	
Total Radiation Received	140,00	kJ/m2

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

# POOL FIRE REPORT

Study Folder: TOP EVENT 23

Unique Audit Number:

534



PHAST v6.00

## 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			160,00		
1,00			160,00		
2,00			160,00		
3,00			160,00		
4,00			160,00		
5,00			160,00		
6,00			160,00		
7,00			160,00		
8,00			160,00		
9,00			160,00		
10,00			160,00		
11,00			160,00		
12,00			160,00		
13,00			160,00		
14,00			160,00		
15,00			160,00		
16,00			144,55		
17,00			113,85		
18,00			100,16		
19,00			93,18		
20,00			87,34		
21,00			83,15		
22,00			79,16		
23,00			76,37		
24,00			73,29		
25,00			71,07		
26,00			68,50		
27,00			66,81		
28,00			64,62		
29,00			62,52		
30,00			61,43		
31,00			59,62		
32,00			57,79		
33,00			57,34		
34,00			55,83		
35,00			54,32		
36,00			52,94		

# POOL FIRE REPORT

Unique Audit Number:

534



Study Folder: TOP EVENT 23

PHAST v6.00

X Coordinates m	Y Coordinates m	Z Coordinates m	Incident Radiation kW/m2	Lethality Level percent	View Factor
37,00			52,98		
38,00			51,75		
39,00			50,52		
40,00			49,29		
41,00			48,16		
42,00			46,97		
43,00			45,89		
44,00			44,82		
45,00			43,76		
46,00			42,73		
47,00			41,69		
48,00			40,69		
49,00			39,68		