

BLEVE 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

TOP EVENT 23\Propane spill out\LPG tanks
Correlation Type

HSE Model

Flame Data

User-Defined Quantities

Material	PROPANE
Ambient Temperature	9,85 C
Ambient Relative Humidity	0,70 fraction
Flammable Mass	939.74 kg
Vapor Fraction	0,39 fraction

Input and/or Output Quantities

Input

Output

BLEVE Radius	28,34 m
BLEVE Duration	4,40 s
Flame Emissive Power	227,85 kW/m2

Flame Co-ordinates

X	Z	R	Phi
m	m	m	degrees
0,00	0,00	0,00	0,00
0,00	1,71	9,69	0,00
0,00	6,63	18,22	0,00
0,00	14,17	24,54	0,00
0,00	23,42	27,91	0,00
0,00	33,26	27,91	0,00
0,00	42,51	24,54	0,00
0,00	50,05	18,22	0,00
0,00	54,97	9,69	0,00
0,00	56,68	0,00	0,00



Radiation Ellipse

User-Defined Quantities

Observer Inclination	Variable	degrees
Exposure Duration	4,40	s

Calculated Quantities

Incident Radiation Level:	3,00	kW/m2
Lethality Level	n/a	percent
View Factor	n/a	
Total Radiation Received	13,19	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

Incident Radiation Level:	5,00	kW/m2
Lethality Level	n/a	percent
View Factor	n/a	
Total Radiation Received	21,99	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

Incident Radiation Level:	7,00	kW/m2
Lethality Level	n/a	percent
View Factor	n/a	
Total Radiation Received	30,78	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

**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			227,85		
1,00			161,12		
2,00			220,30		
3,00			217,76		
4,00			214,54		
5,00			211,70		
6,00			202,25		
7,00			201,10		
8,00			206,12		
9,00			225,01		
10,00			191,15		
11,00			178,25		
12,00			172,36		
13,00			166,61		
14,00			161,43		
15,00			156,28		
16,00			150,91		
17,00			145,46		
18,00			140,00		
19,00			134,31		
20,00			129,06		
21,00			124,13		
22,00			119,41		
23,00			114,84		
24,00			110,43		
25,00			106,09		
26,00			101,88		
27,00			97,64		
28,00			93,77		
29,00			90,09		
30,00			86,61		
31,00			83,32		
32,00			80,17		
33,00			77,17		
34,00			74,30		
35,00			71,53		
36,00			68,84		
37,00			66,20		

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X Coordinates m	Y Coordinates m	Z Coordinates m	Incident Radiation kW/m2	Lethality Level percent	View Factor
38,00			63,74		
39,00			61,36		
40,00			59,06		
41,00			56,86		
42,00			54,91		
43,00			53,04		
44,00			51,18		
45,00			49,48		
46,00			47,84		
47,00			46,26		
48,00			44,73		
49,00			43,29		



Weather: Category 5/D
Speed: 5,00 m/s

Stability: D

TOP EVENT 23\Propane spill out\LPG tanks
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Flame Data

User-Defined Quantities

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Ambient Relative Humidity	0,70 fraction
Flammable Mass	939,74 kg
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Input and/or Output Quantities

Input	Output
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0,00	54,97	9,69	0,00
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Radiation Ellipse

User-Defined Quantities

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23,00			114,84		
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25,00			106,09		
26,00			101,88		
27,00			97,64		
28,00			93,77		
29,00			90,09		
30,00			86,61		
31,00			83,32		
32,00			80,17		
33,00			77,17		
34,00			74,30		
35,00			71,53		
36,00			68,84		
37,00			66,20		

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43,00			53,04		
44,00			51,18		
45,00			49,48		
46,00			47,84		
47,00			46,26		
48,00			44,73		
49,00			43,29		