

POOL FIRE REPORT

Study Folder: TOP EVENT 2

Unique Audit Number:

186



PHAST v6.00



TOP EVENT 2




Methanol spill out

Inside containment basins

Base Case

Data

 **Weather:** Category 2/F
Speed: 2,00 m/s **Stability:** F

TOP EVENT 2\Methanol spill out\Inside containment basins

Flame Data

Correlation Type

Thomas / Johnson

User-Defined Quantities

Material	METHANOL
Ambient Temperature	9,85 C
Ambient Relative Humidity	0,70 fraction
Ambient Wind Speed	2,00 m/s
Pool Diameter	6,32 m
Surface Type	Land
Elevation	0,00 m
Maximum Exposure Duration	20,00 s

Input and/or Output Quantities

Input

Output

Flame Length	5,22 m
Flame Angle	37,44 degrees
Flame Emissive Power	152,94 kW/m2

Flame Co-ordinates

X m	Z m	R m	Phi degrees
0,00	0,00	3,16	0,00
3,17	4,14	3,16	0,00
3,17	4,14	0,00	0,00

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Radiation Ellipse

User-Defined Quantities

Observer Inclination	Variable	degrees
Exposure Duration	20,00	s

Calculated Quantities

Incident Radiation Level:	3,00	kW/m2
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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

Incident Radiation Level:	5,00	kW/m2
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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

Incident Radiation Level:	7,00	kW/m2
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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

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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			152,94		
1,00			152,94		
2,00			152,94		
3,00			152,94		
4,00			97,59		
5,00			79,31		
6,00			63,87		
7,00			49,95		
8,00			38,27		
9,00			29,19		
10,00			22,38		
11,00			17,37		
12,00			13,72		
13,00			11,17		
14,00			9,25		
15,00			7,72		
16,00			6,53		
17,00			5,52		
18,00			4,78		
19,00			4,18		
20,00			3,68		
21,00			3,27		
22,00			2,92		
23,00			2,62		
24,00			2,37		
25,00			2,15		
26,00			1,96		
27,00			1,79		
28,00			1,64		
29,00			1,51		
30,00			1,40		
31,00			1,29		
32,00			1,20		
33,00			1,12		
34,00			1,05		
35,00			0,98		
36,00			0,92		

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X Coordinates m	Y Coordinates m	Z Coordinates m	Incident Radiation kW/m2	Lethality Level percent	View Factor
37,00			0,86		
38,00			0,81		
39,00			0,76		
40,00			0,72		
41,00			0,68		
42,00			0,65		
43,00			0,61		
44,00			0,58		
45,00			0,55		
46,00			0,53		
47,00			0,50		
48,00			0,48		
49,00			0,46		

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

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Flame Data

Correlation Type

Thomas / Johnson

User-Defined Quantities

Material	METHANOL
Ambient Temperature	9,85 C
Ambient Relative Humidity	0,70 fraction
Ambient Wind Speed	5,00 m/s
Pool Diameter	6,32 m
Surface Type	Land
Elevation	0,00 m
Maximum Exposure Duration	20,00 s

Input and/or Output Quantities

Input

Output

Flame Length	5,22 m
Flame Angle	53,95 degrees
Flame Emissive Power	152,94 kW/m2

Flame Co-ordinates

X m	Z m	R m	Phi degrees
0,00	0,00	3,16	0,00
4,22	3,07	3,16	0,00
4,22	3,07	0,00	0,00

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Radiation Ellipse

User-Defined Quantities

Observer Inclination	Variable	degrees
Exposure Duration	20,00	s

Calculated Quantities

Incident Radiation Level:	3,00	kW/m2
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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

Incident Radiation Level:	5,00	kW/m2
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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

Incident Radiation Level:	7,00	kW/m2
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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

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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			152,94		
1,00			152,94		
2,00			152,94		
3,00			152,94		
4,00			110,35		
5,00			96,83		
6,00			82,82		
7,00			66,33		
8,00			49,17		
9,00			34,93		
10,00			24,78		
11,00			18,09		
12,00			13,56		
13,00			10,44		
14,00			8,32		
15,00			6,80		
16,00			5,63		
17,00			4,75		
18,00			4,05		
19,00			3,47		
20,00			3,02		
21,00			2,66		
22,00			2,36		
23,00			2,10		
24,00			1,89		
25,00			1,70		
26,00			1,55		
27,00			1,41		
28,00			1,29		
29,00			1,18		
30,00			1,09		
31,00			1,01		
32,00			0,93		
33,00			0,87		
34,00			0,81		
35,00			0,75		
36,00			0,71		

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X Coordinates m	Y Coordinates m	Z Coordinates m	Incident Radiation kW/m2	Lethality Level percent	View Factor
37,00			0,66		
38,00			0,62		
39,00			0,59		
40,00			0,55		
41,00			0,52		
42,00			0,49		
43,00			0,47		
44,00			0,44		
45,00			0,42		
46,00			0,40		
47,00			0,38		
48,00			0,36		
49,00			0,35		