

JET 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

User-Defined Quantities

Model Correlation Type	Shell	
Material	METHANOL	
Ambient Temperature	9,85	C
Ambient Relative Humidity	0,70	fraction
Ambient Wind Speed	2,00	m/s
Maximum Exposure Duration	20,00	s
Elevation	1,00	m
Liquid Fraction		fraction
Jet Angle from Horizontal	0,00	degrees
Expanded Temperature	43,87	C
Release Rate	0,00	kg/s

Input and/or Output Quantities

	Input	Output
Flame Emissive Power		3,27 kW/m2
Expanded Radius		0,00 m
Jet Velocity	1,63	m/s
Flame Length		0,86 m
Maximum Flame Radius		m

Flame Co-ordinates

X	Z	R	Phi
m	m	m	degrees
0,01	1,00	0,00	90,00
0,01	1,00	0,01	90,00
0,86	1,00	0,15	90,00
0,86	1,00	0,00	90,00



Radiation Ellipse

User-Defined Quantities

Observer Inclination	Variable	degrees
Exposure Duration	20,00	s

Calculated Quantities

Incident Radiation Level: **3,00** 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) 0,00

Effect Distance -3,00 m

Area 28,27 m2

Incident Radiation Level: **5,00** kW/m2

Lethality Level n/a percent

View Factor n/a

Total Radiation Received 100,00 kJ/m2

Downwind semi-axis (A) Not Reached m

Crosswind semi-axis (B) Not Reached m

Offset Ratio (D) 0,00

Effect Distance -12,00 m

Area 452,39 m2

Incident Radiation Level: **7,00** 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) 0,00

Effect Distance -12,00 m

Area 452,39 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
0,01			2,31		
1,01			2,31		
2,01			0,03		
3,01			0,01		
4,01			0,01		
5,01			0,00		
6,01			0,00		
7,01			0,00		
8,01			0,00		
9,01			0,00		
10,01			0,00		
11,01			0,00		
12,01			0,00		
13,01			0,00		
14,01			0,00		
15,01			0,00		
16,01			0,00		
17,01			0,00		
18,01			0,00		
19,01			0,00		
20,01			0,00		
21,01			0,00		
22,01			0,00		
23,01			0,00		
24,01			0,00		
25,01			0,00		
26,01			0,00		
27,01			0,00		
28,01			0,00		
29,01			0,00		
30,01			0,00		
31,00			0,00		
32,00			0,00		
33,00			0,00		
34,00			0,00		
35,00			0,00		
36,00			0,00		

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



Weather: **Category 5/D**

Speed: 5,00 m/s

Stability: D

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Flame Data

User-Defined Quantities

Model Correlation Type	Shell
Material	METHANOL
Ambient Temperature	9,85 C
Ambient Relative Humidity	0,70 fraction
Ambient Wind Speed	5,00 m/s
Maximum Exposure Duration	20,00 s
Elevation	1,00 m
Liquid Fraction	fraction
Jet Angle from Horizontal	0,00 degrees
Expanded Temperature	43,87 C
Release Rate	0,00 kg/s

Input and/or Output Quantities

	Input	Output
Flame Emissive Power		4,78 kW/m2
Expanded Radius		0,00 m
Jet Velocity	1,63	m/s
Flame Length		0,41 m
Maximum Flame Radius		m

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Flame Co-ordinates

X	Z	R	Phi
m	m	m	degrees
0,01	1,00	0,00	90,00
0,01	1,00	0,00	90,00
0,41	1,00	0,06	90,00
0,41	1,00	0,00	90,00

Radiation Ellipse

User-Defined Quantities

Observer Inclination	Variable	degrees
Exposure Duration	20,00	s

Calculated Quantities

Incident Radiation Level:	3,00	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)	0,00	
Effect Distance	-3,00	m
Area	28,27	m2

Incident Radiation Level:	5,00	kW/m2
Lethality Level	n/a	percent
View Factor	n/a	
Total Radiation Received	100,00	kJ/m2

Downwind semi-axis (A)	Not Reached	m
Crosswind semi-axis (B)	Not Reached	m
Offset Ratio (D)	0,00	
Effect Distance	-12,00	m
Area	452,39	m2

Incident Radiation Level:	7,00	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)	0,00	
Effect Distance	-12,00	m
Area	452,39	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
0,01			3,38		
1,01			0,02		
2,01			0,01		
3,01			0,00		
4,01			0,00		
5,01			0,00		
6,01			0,00		
7,01			0,00		
8,01			0,00		
9,01			0,00		
10,00			0,00		
11,00			0,00		
12,00			0,00		
13,00			0,00		
14,00			0,00		
15,00			0,00		
16,00			0,00		
17,00			0,00		
18,00			0,00		
19,00			0,00		
20,00			0,00		
21,00			0,00		
22,00			0,00		
23,00			0,00		
24,00			0,00		
25,00			0,00		
26,00			0,00		
27,00			0,00		
28,00			0,00		
29,00			0,00		
30,00			0,00		
31,00			0,00		
32,00			0,00		
33,00			0,00		
34,00			0,00		
35,00			0,00		
36,00			0,00		

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