

Consequence Summary Report

Workspace: CapWatt_Mangualde_HyMeOH

Study: 3600s

Summary Basis

These tables will only report global values set in the parameters. Values that are modified in the study tree will not be reported.

The report is context sensitive, and filters up to the study level. You will need to generate multiple summary reports if you have multiple studies in your workspace.

The results in this report are from the non-CFD calculations only.

Discharge Results (after atmospheric expansion)

Path	Scenario	Weather	Peak Flowrate [kg/s]	Temperature [degC]	Liquid mass fraction in material [fraction]	Droplet diameter [um]	Expanded diameter [m]	Velocity [m/s]	End time of release [s]
3600s\1_Rotura catastrófica de reservatório 65-D-001	1_Rotura catastrófica de reservatório 65-D-001	1,0/F		-182,946	0,829246	208,609		20,5579	
		3,7/E		-182,946	0,829246	208,609		20,5579	
		5,0/D		-182,946	0,829246	208,609		20,5579	
3600s\2_Fuga de 100mm de reservatório 65-D-001	2_Fuga de 100mm de reservatório 65-D-001	1,0/F	198,832	-182,946	0,829246	221,624	0,310161	102,789	860,022
		3,7/E	198,832	-182,946	0,829246	221,624	0,310161	102,789	860,022
		5,0/D	198,832	-182,946	0,829246	221,624	0,310161	102,789	860,022
3600s\3_Fuga de 10mm de reservatório 65-D-001	3_Fuga de 10mm de reservatório 65-D-001	1,0/F	1,98832	-182,946	0,829246	221,624	0,0310161	102,789	3600
		3,7/E	1,98832	-182,946	0,829246	221,624	0,0310161	102,789	3600
		5,0/D	1,98832	-182,946	0,829246	221,624	0,0310161	102,789	3600
3600s\27_Rotura Catastrófica do Flash Drum 42-V-003	27_Rotura Catastrófica do Flash Drum 42-V-003	1,0/F		-64,8326	0	0		174,389	
		3,7/E		-64,8326	0	0		174,389	
		5,0/D		-64,8326	0	0		174,389	

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3600s\28_Fuga de 100mm do Flash Drum 42-V-003	28_Fuga de 100mm do Flash Drum 42-V-003	1,0/F	3,83095	10,0778	0	0	0,140434	554,128	549,22
		3,7/E	3,83095	10,0778	0	0	0,140434	554,128	549,22
		5,0/D	3,83095	10,0778	0	0	0,140434	554,128	549,22
3600s\29_Fuga de 10 mm do Flash Drum 42-V-003	29_Fuga de 10 mm do Flash Drum 42-V-003	1,0/F	0,0383095	10,0778	0	0	0,0140434	554,128	3600
		3,7/E	0,0383095	10,0778	0	0	0,0140434	554,128	3600
		5,0/D	0,0383095	10,0778	0	0	0,0140434	554,128	3600
3600s\32_Rotura catastrófica de reservatório 44-D-001	32_Rotura catastrófica de reservatório 44-D-001	1,0/F		24,9924	1	10000		2,57642	
		3,7/E		24,9924	1	10000		2,57642	
		5,0/D		24,9924	1	10000		2,57642	
3600s\33_Fuga de 100mm de reservatório 44-D-001	33_Fuga de 100mm de reservatório 44-D-001	1,0/F	70,0538	24,9849	1	712,203	0,0787401	18,2192	3600
		3,7/E	70,0538	24,9849	1	695,202	0,0787401	18,2192	3600
		5,0/D	70,0538	24,9849	1	683,54	0,0787401	18,2192	3600
3600s\34_Fuga de 10mm de reservatório 44-D-001	34_Fuga de 10mm de reservatório 44-D-001	1,0/F	0,700538	24,9849	1	712,203	0,00787401	18,2192	3600
		3,7/E	0,700538	24,9849	1	695,202	0,00787401	18,2192	3600
		5,0/D	0,700538	24,9849	1	683,54	0,00787401	18,2192	3600
3600s\43_Rotura catastrófica de reservatório 01-45-D-001A	43_Rotura catastrófica de reservatório 01-45-D-001A	1,0/F		24,9894	1	10000		3,05538	
		3,7/E		24,9894	1	10000		3,05538	
		5,0/D		24,9894	1	10000		3,05538	
3600s\44_Fuga de 100mm de	44_Fuga de 100mm de	1,0/F	83,0754	24,9787	1	506,453	0,0787401	21,6057	3600



reservatório 01-45-D-001A reservatório 01-45-D-001A

		3,7/E	83,0754	24,9787	1	494,363	0,0787401	21,6057	3600
		5,0/D	83,0754	24,9787	1	486,07	0,0787401	21,6057	3600
3600s\45_Fuga de 10mm de reservatório 01-45-D-001A	45_Fuga de 10mm de reservatório 01-45-D-001A	1,0/F	0,830754	24,9787	1	506,453	0,00787401	21,6057	3600
		3,7/E	0,830754	24,9787	1	494,363	0,00787401	21,6057	3600
		5,0/D	0,830754	24,9787	1	486,07	0,00787401	21,6057	3600
3600s\46_Rotura catastrófica de reservatório 01-57-D-001A	46_Rotura catastrófica de reservatório 01-57-D-001A	1,0/F		24,9883	1	10000		2,89303	
		3,7/E		24,9883	1	10000		2,89303	
		5,0/D		24,9883	1	10000		2,89303	
3600s\47_Fuga de 100mm de reservatório 01-57-D-001A	47_Fuga de 100mm de reservatório 01-57-D-001A	1,0/F	71,5856	24,9761	1	566,953	0,0787401	20,5042	1103,57
		3,7/E	71,5856	24,9761	1	553,419	0,0787401	20,5042	1103,57
		5,0/D	71,5856	24,9761	1	544,135	0,0787401	20,5042	1103,57
3600s\48_Fuga de 10mm de reservatório 01-57-D-001A	48_Fuga de 10mm de reservatório 01-57-D-001A	1,0/F	0,715856	24,9761	1	566,953	0,00787401	20,5042	3600
		3,7/E	0,715856	24,9761	1	553,419	0,00787401	20,5042	3600
		5,0/D	0,715856	24,9761	1	544,135	0,00787401	20,5042	3600
3600s\53_Rotura de Cisterna com Metanol	53_Rotura de Cisterna com Metanol	1,0/F		44,9979	1	10000		1,24703	
		3,7/E		44,9979	1	10000		1,24703	
		5,0/D		44,9979	1	10000		1,24703	
3600s\54_Fuga	54_Fuga de	1,0/F	33,0611	44,9957	1	2816,01	0,0787401	8,81784	725,929

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Metanol

		3,7/E	33,0611	44,9957	1	2748,79	0,0787401	8,81784	725,929
		5,0/D	33,0611	44,9957	1	2702,68	0,0787401	8,81784	725,929
3600s\55_Fuga de 10 mm numa Cisterna com Metanol	55_Fuga de 10 mm numa Cisterna com Metanol	1,0/F	0,330611	44,9957	1	2816,01	0,00787401	8,81784	3600
		3,7/E	0,330611	44,9957	1	2748,79	0,00787401	8,81784	3600
		5,0/D	0,330611	44,9957	1	2702,68	0,00787401	8,81784	3600
3600s\62_Rotura de Cisterna com Fusel óleo	62_Rotura de Cisterna com Fusel óleo	1,0/F		44,9975	1	10000		1,198	
		3,7/E		44,9975	1	10000		1,198	
		5,0/D		44,9975	1	10000		1,198	
3600s\63_Fuga de 100 mm numa Cisterna com Fusel óleo	63_Fuga de 100 mm numa Cisterna com Fusel óleo	1,0/F	28,5109	44,9955	1	3124,25	0,0787401	8,34957	841,784
		3,7/E	28,5109	44,9955	1	3049,67	0,0787401	8,34957	841,784
		5,0/D	28,5109	44,9955	1	2998,52	0,0787401	8,34957	841,784
3600s\64_Fuga de 10 mm numa Cisterna com Fusel óleo	64_Fuga de 10 mm numa Cisterna com Fusel óleo	1,0/F	0,285109	44,9955	1	3124,25	0,00787401	8,34957	3600
		3,7/E	0,285109	44,9955	1	3049,67	0,00787401	8,34957	3600
		5,0/D	0,285109	44,9955	1	2998,52	0,00787401	8,34957	3600
3600s\65_Rotura do troço aéreo a jusante da PRM	Short pipe	1,0/F	0,180833	24,7498	0	0	0,1	35,0228	3600
		3,7/E	0,180833	24,7498	0	0	0,1	35,0228	3600



		5,0/D	0,180833	24,7498	0	0	0,1	35,0228	3600
3600s\66_Fuga do troço aéreo a jusante da PRM	Leak	1,0/F	0,00996268	7,31499	0	0	0,00807404	278,538	3600
		3,7/E	0,00996268	7,31499	0	0	0,00807404	278,538	3600
		5,0/D	0,00996268	7,31499	0	0	0,00807404	278,538	3600

Dispersion Results

Input dispersion parameters

Core averaging time	18,75	s
Flammable averaging time	18,75	s
Toxic averaging time	600	s
Height of interest	0	m

Distance downwind to minimum defined concentration

The reported concentration of interest is defined at the scenario

Path	Scenario	Weather	Material	Material to track	Minimum concentration of interest [ppm]	Averaging time used for concentration of interest [s]	Distance downwind to minimum concentration of interest [m]
3600s\1_Rotura catastrófica de reservatório 65-D-001	1_Rotura catastrófica de reservatório 65-D-001	1,0/F	OXYGEN	OXYGEN	30000	User-defined (600)	599,279
		3,7/E	OXYGEN	OXYGEN	30000	User-defined (600)	411,649
		5,0/D	OXYGEN	OXYGEN	30000	User-defined (600)	413,342
3600s\2_Fuga de 100mm de reservatório 65-D-001	2_Fuga de 100mm de reservatório 65-D-001	1,0/F	OXYGEN	OXYGEN	30000	User-defined (600)	606,437
		3,7/E	OXYGEN	OXYGEN	30000	User-defined (600)	241,073
		5,0/D	OXYGEN	OXYGEN	30000	User-defined (600)	222,218
3600s\3_Fuga de 10mm de reservatório 65-D-001	3_Fuga de 10mm de reservatório 65-D-001	1,0/F	OXYGEN	OXYGEN	30000	User-defined (600)	60,4456
		3,7/E	OXYGEN	OXYGEN	30000	User-defined (600)	30,5094
		5,0/D	OXYGEN	OXYGEN	30000	User-defined (600)	30,5595

Distance downwind to flammable concentrations

Path	Scenario	Weather	Distance to UFL [m]	Distance to LFL [m]	Distance to LFL fraction [m]
3600s\27_Rotura Catastrófica do Flash Drum 42-V-003	27_Rotura Catastrófica do Flash Drum 42-V-003	1,0/F	10,6153	24,9274	32,3439
		3,7/E	10,6124	26,0888	41,5717
		5,0/D	10,6118	26,9708	47,4915
3600s\28_Fuga de 100mm do Flash Drum 42-V-003	28_Fuga de 100mm do Flash Drum 42-V-003	1,0/F	2,9576	16,1151	19,0824
		3,7/E	2,28839	22,5516	28,1247
		5,0/D	1,87086	26,2692	33,5562
3600s\29_Fuga de 10 mm do Flash Drum 42-V-003	29_Fuga de 10 mm do Flash Drum 42-V-003	1,0/F	Not reached at height of interest	2,80495	5,66136
		3,7/E	Not reached at height of interest	2,50148	6,51449
		5,0/D	Not reached at height of interest	1,98921	6,27896
3600s\32_Rotura catastrófica de reservatório 44-D-001	32_Rotura catastrófica de reservatório 44-D-001	1,0/F	5,14058	8,71339	14,5871
		3,7/E	5,40873	12,0079	26,7545
		5,0/D	5,59421	11,9319	28,0978
3600s\33_Fuga de 100mm de reservatório 44-D-001	33_Fuga de 100mm de reservatório 44-D-001	1,0/F	3,77886	10,7451	24,4092
		3,7/E	3,72527	8,28658	19,5078
		5,0/D	3,66309	7,44338	16,3378
3600s\34_Fuga de 10mm de reservatório 44-D-001	34_Fuga de 10mm de reservatório 44-D-001	1,0/F	Not reached at height of interest	2,77761	9,66761
		3,7/E	Not reached at height of interest	2,47996	2,78405
		5,0/D	Not reached at height of interest	2,35088	2,56043

3600s\43_Rotura catastrófica de reservatório 01-45-D-001A	43_Rotura catastrófica de reservatório 01-45-D-001A	1,0/F	11,7564	20,2985	33,1356
		3,7/E	10,7505	18,5141	39,2378
		5,0/D	10,9373	17,0671	40,3359
3600s\44_Fuga de 100mm de reservatório 01-45-D-001A	44_Fuga de 100mm de reservatório 01-45-D-001A	1,0/F	4,59157	14,5492	34,6191
		3,7/E	4,55835	10,6122	23,1075
		5,0/D	4,49237	8,52503	19,6018
3600s\45_Fuga de 10mm de reservatório 01-45-D-001A	45_Fuga de 10mm de reservatório 01-45-D-001A	1,0/F	Not reached at height of interest	3,16987	10,4575
		3,7/E	Not reached at height of interest	2,84645	3,22284
		5,0/D	Not reached at height of interest	2,70616	2,96907
3600s\46_Rotura catastrófica de reservatório 01-57-D-001A	46_Rotura catastrófica de reservatório 01-57-D-001A	1,0/F	3,17196	3,20162	3,20398
		3,7/E	3,40632	3,41897	3,41952
		5,0/D	3,58699	3,5896	3,58983
3600s\47_Fuga de 100mm de reservatório 01-57-D-001A	47_Fuga de 100mm de reservatório 01-57-D-001A	1,0/F	6,28424	7,92831	8,62024
		3,7/E	5,48647	6,50074	7,00542
		5,0/D	5,08154	5,78738	6,17323
3600s\48_Fuga de 10mm de reservatório 01-57-D-001A	48_Fuga de 10mm de reservatório 01-57-D-001A	1,0/F	2,41884	3,54765	3,86374
		3,7/E	2,32421	3,01276	3,20822
		5,0/D	2,29264	2,79319	2,93157
3600s\53_Rotura de Cisterna com Metanol	53_Rotura de Cisterna com Metanol	1,0/F	2,80342	7,05767	17,9748
		3,7/E	3,18979	9,58002	20,4747
		5,0/D	3,48945	8,16063	15,8225
3600s\54_Fuga de 100 mm	54_Fuga de 100 mm	1,0/F	2,09375	10,2462	13,5106

numa Cisterna com Metanol	numa Cisterna com Metanol				
		3,7/E	1,81854	9,12867	12,6504
		5,0/D	1,65927	7,28314	11,0331
3600s\55_Fuga de 10 mm numa Cisterna com Metanol	55_Fuga de 10 mm numa Cisterna com Metanol	1,0/F	0,996586	2,11226	6,90636
		3,7/E	1,00004	1,42291	1,61966
		5,0/D	1,00044	1,31906	1,44034
3600s\62_Rotura de Cisterna com Fusel óleo	62_Rotura de Cisterna com Fusel óleo	1,0/F	3,04004	3,44725	11,9055
		3,7/E	3,41989	3,42227	5,6127
		5,0/D	3,73922	3,73996	3,75553
3600s\63_Fuga de 100 mm numa Cisterna com Fusel óleo	63_Fuga de 100 mm numa Cisterna com Fusel óleo	1,0/F	2,39884	3,8157	7,69477
		3,7/E	2,03179	3,15578	6,28876
		5,0/D	1,85367	2,27432	4,56041
3600s\64_Fuga de 10 mm numa Cisterna com Fusel óleo	64_Fuga de 10 mm numa Cisterna com Fusel óleo	1,0/F	1,36085	1,91141	2,06352
		3,7/E	1,24602	1,54845	1,63696
		5,0/D	1,19085	1,40205	1,46371
3600s\65_Rotura do troço aéreo a jusante da PRM	Short pipe	1,0/F	2,26736	3,64868	4,37988
		3,7/E	2,56495	4,65851	6,15979
		5,0/D	2,50158	5,15743	7,19752
3600s\66_Fuga do troço aéreo a jusante da PRM	Leak	1,0/F	Not reached at height of interest	Not reached at height of interest	2,05428
		3,7/E	Not reached at height of interest	Not reached at height of interest	1,33282
		5,0/D	Not reached at height of interest	Not reached at height of interest	Not reached at height of interest

Outdoor Toxic Results

Distance downwind to defined concentrations

The reported concentrations are defined in the respective material properties

Path	Scenario	Weather	Distance downwind to ERPG1 (3600 s) [m]	Distance downwind to ERPG2 (3600 s) [m]	Distance downwind to ERPG3 (3600 s) [m]	Distance downwind to STEL (900 s) [m]	Distance downwind to IDLH (1800 s) [m]
3600s\27_Rotura Catastrófica do Flash Drum 42-V-003	27_Rotura Catastrófica do Flash Drum 42-V-003	1,0/F	n/a	n/a	n/a	n/a	n/a
		3,7/E	n/a	n/a	n/a	n/a	n/a
		5,0/D	n/a	n/a	n/a	n/a	n/a
3600s\28_Fuga de 100mm do Flash Drum 42-V-003	28_Fuga de 100mm do Flash Drum 42-V-003	1,0/F	n/a	n/a	n/a	n/a	n/a
		3,7/E	n/a	n/a	n/a	n/a	n/a
		5,0/D	n/a	n/a	n/a	n/a	n/a
3600s\29_Fuga de 10 mm do Flash Drum 42-V-003	29_Fuga de 10 mm do Flash Drum 42-V-003	1,0/F	n/a	n/a	n/a	n/a	n/a
		3,7/E	n/a	n/a	n/a	n/a	n/a
		5,0/D	n/a	n/a	n/a	n/a	n/a
3600s\32_Rotura catastrófica de reservatório 44-D-001	32_Rotura catastrófica de reservatório 44-D-001	1,0/F	n/a	n/a	n/a	n/a	n/a
		3,7/E	n/a	n/a	n/a	n/a	n/a
		5,0/D	n/a	n/a	n/a	n/a	n/a
3600s\33_Fuga de 100mm de reservatório 44-D-001	33_Fuga de 100mm de reservatório 44-D-001	1,0/F	n/a	n/a	n/a	n/a	n/a
		3,7/E	n/a	n/a	n/a	n/a	n/a
		5,0/D	n/a	n/a	n/a	n/a	n/a
3600s\34_Fuga de 10mm de reservatório 44-D-001	34_Fuga de 10mm de reservatório 44-D-001	1,0/F	n/a	n/a	n/a	n/a	n/a

		3,7/E	n/a	n/a	n/a	n/a	n/a
		5,0/D	n/a	n/a	n/a	n/a	n/a
3600s\43_Rotura catastrófica de reservatório 01-45- D-001A	43_Rotura catastrófica de reservatório 01-45-D-001A	1,0/F	n/a	n/a	n/a	n/a	n/a
		3,7/E	n/a	n/a	n/a	n/a	n/a
		5,0/D	n/a	n/a	n/a	n/a	n/a
3600s\44_Fuga de 100mm de reservatório 01-45- D-001A	44_Fuga de 100mm de reservatório 01-45-D-001A	1,0/F	n/a	n/a	n/a	n/a	n/a
		3,7/E	n/a	n/a	n/a	n/a	n/a
		5,0/D	n/a	n/a	n/a	n/a	n/a
3600s\45_Fuga de 10mm de reservatório 01-45- D-001A	45_Fuga de 10mm de reservatório 01-45-D-001A	1,0/F	n/a	n/a	n/a	n/a	n/a
		3,7/E	n/a	n/a	n/a	n/a	n/a
		5,0/D	n/a	n/a	n/a	n/a	n/a
3600s\53_Rotura de Cisterna com Metanol	53_Rotura de Cisterna com Metanol	1,0/F	n/a	n/a	n/a	n/a	n/a
		3,7/E	n/a	n/a	n/a	n/a	n/a
		5,0/D	n/a	n/a	n/a	n/a	n/a
3600s\54_Fuga de 100 mm numa Cisterna com Metanol	54_Fuga de 100 mm numa Cisterna com Metanol	1,0/F	n/a	n/a	n/a	n/a	n/a
		3,7/E	n/a	n/a	n/a	n/a	n/a
		5,0/D	n/a	n/a	n/a	n/a	n/a
3600s\55_Fuga de 10 mm numa Cisterna com Metanol	55_Fuga de 10 mm numa Cisterna com Metanol	1,0/F	n/a	n/a	n/a	n/a	n/a
		3,7/E	n/a	n/a	n/a	n/a	n/a
		5,0/D	n/a	n/a	n/a	n/a	n/a

Distance downwind to defined dangerous doses

The reported dangerous doses are defined in the respective material properties

Path	Scenario	Weather	Distance downwind to dangerous toxic load [m]	Distance downwind to dangerous dose 2 [m]	Distance downwind to dangerous dose 3 [m]
3600s\32_Rotura catastrófica de reservatório 44-D-001	32_Rotura catastrófica de reservatório 44-D-001	1,0/F	236,481	43,8457	14,7978
		3,7/E	118,443	28,912	5,28911
		5,0/D	67,5413	23,3692	n/a
3600s\33_Fuga de 100mm de reservatório 44-D-001	33_Fuga de 100mm de reservatório 44-D-001	1,0/F	535,667	150,097	53,9875
		3,7/E	77,1171	55,2418	36,2334
		5,0/D	96,014	48,0877	27,4887
3600s\34_Fuga de 10mm de reservatório 44-D-001	34_Fuga de 10mm de reservatório 44-D-001	1,0/F	239,597	67,4396	22,4546
		3,7/E	72,6556	25,6428	12,9834
		5,0/D	41,7399	19,9327	10,5929
3600s\43_Rotura catastrófica de reservatório 01-45-D-001A	43_Rotura catastrófica de reservatório 01-45-D-001A	1,0/F	472,864	82,97	32,5146
		3,7/E	240,163	55,7496	-24,346
		5,0/D	138,714	47,9683	n/a
3600s\44_Fuga de 100mm de reservatório 01-45-D-001A	44_Fuga de 100mm de reservatório 01-45-D-001A	1,0/F	825,378	237,736	74,6095
		3,7/E	345,779	122,274	56,9069
		5,0/D	157,265	82,2232	49,75
3600s\45_Fuga de 10mm de reservatório 01-45-D-001A	45_Fuga de 10mm de reservatório 01-45-D-001A	1,0/F	258,868	71,2058	24,5912
		3,7/E	79,2135	28,2384	14,5978
		5,0/D	46,0641	22,2261	12,1141
3600s\53_Rotura de Cisterna com Metanol	53_Rotura de Cisterna com	1,0/F	207,083	43,2862	7,65467

Metanol

		3,7/E	71,2848	17,8672	5,77733
		5,0/D	35,0187	10,8822	0,905628
3600s\54_Fuga de 100 mm numa Cisterna com Metanol	54_Fuga de 100 mm numa Cisterna com Metanol	1,0/F	148,564	35,8354	16,0509
		3,7/E	71,5766	23,4088	12,9235
		5,0/D	49,0408	20,2998	10,5348
3600s\55_Fuga de 10 mm numa Cisterna com Metanol	55_Fuga de 10 mm numa Cisterna com Metanol	1,0/F	160,061	53,613	15,2497
		3,7/E	44,9192	17,8334	8,14964
		5,0/D	28,7969	12,0133	6,66351

Exposure duration at defined dangerous doses

The reported dangerous doses are defined in the respective material properties

Path	Scenario	Weather	Exposure duration for dangerous toxic load [s]	Exposure duration for dangerous dose 2 [s]	Exposure duration for dangerous dose 3 [s]	Exposure duration for dangerous dose 4 [s]	Exposure duration for dangerous dose 5 [s]	Exposure duration for dangerous dose 6 [s]
3600s\32_Rotura catastrófica de reservatório 44-D-001	32_Rotura catastrófica de reservatório 44-D-001	1,0/F	3052,61	3122,74	3246,95	n/a	n/a	n/a
		3,7/E	3204,41	3233,83	3272,52	n/a	n/a	n/a
		5,0/D	3201,65	3224,52	n/a	n/a	n/a	n/a
3600s\33_Fuga de 100mm de reservatório 44-D-001	33_Fuga de 100mm de reservatório 44-D-001	1,0/F	3252,3	3218,73	3217,46	n/a	n/a	n/a
		3,7/E	3301,43	3252,09	3245,59	n/a	n/a	n/a
		5,0/D	3190,83	3219,2	3260,88	n/a	n/a	n/a
3600s\34_Fuga de 10mm de reservatório 44-D-001	34_Fuga de 10mm de reservatório 44-D-001	1,0/F	2991,31	2944,25	2908,28	n/a	n/a	n/a
		3,7/E	2885,7	2937,8	3032,94	n/a	n/a	n/a

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		5,0/D	2956,14	3031,46	3126,57	n/a	n/a	n/a
3600s\43_Rotura catastrófica de reservatório 01- 45-D-001A	43_Rotura catastrófica de reservatório 01-45-D- 001A	1,0/F	3080,39	3213,01	3297,46	n/a	n/a	n/a
		3,7/E	3217,48	3261,46	n/a	n/a	n/a	n/a
		5,0/D	3212,25	3245,16	n/a	n/a	n/a	n/a
3600s\44_Fuga de 100mm de reservatório 01- 45-D-001A	44_Fuga de 100mm de reservatório 01-45-D- 001A	1,0/F	3257,88	3235,93	3191,78	n/a	n/a	n/a
		3,7/E	3063,58	3070,99	3213,26	n/a	n/a	n/a
		5,0/D	3118,52	3123,47	3153,93	n/a	n/a	n/a
3600s\45_Fuga de 10mm de reservatório 01- 45-D-001A	45_Fuga de 10mm de reservatório 01-45-D- 001A	1,0/F	2992,06	2935,59	2899,46	n/a	n/a	n/a
		3,7/E	2894,34	2957,01	3086,78	n/a	n/a	n/a
		5,0/D	2984,35	3067,84	3162,16	n/a	n/a	n/a
3600s\53_Rotura de Cisterna com Metanol	53_Rotura de Cisterna com Metanol	1,0/F	3263,75	3267,48	3307,08	n/a	n/a	n/a
		3,7/E	3203,88	3215,28	3225,78	n/a	n/a	n/a
		5,0/D	3199,43	3209,11	3226,22	n/a	n/a	n/a
3600s\54_Fuga de 100 mm numa Cisterna com Metanol	54_Fuga de 100 mm numa Cisterna com Metanol	1,0/F	2583,39	3015,46	3282,23	n/a	n/a	n/a
		3,7/E	3115,62	3217,12	3076,11	n/a	n/a	n/a
		5,0/D	3112,7	3047,01	2891,92	n/a	n/a	n/a
3600s\55_Fuga de 10 mm numa Cisterna com Metanol	55_Fuga de 10 mm numa Cisterna	1,0/F	2374,7	2337,18	2313,23	n/a	n/a	n/a

com
Metanol

		3,7/E	2142,84	2939,8	3037,42	n/a	n/a	n/a
		5,0/D	2960,38	3026,03	3102,47	n/a	n/a	n/a

Jet Fire Results

Distance downwind to defined radiation levels

The reported radiations are defined in the parameters

Path	Scenario	Weather	Flame length [m]	Distance downwind to intensity level 1 (37,5 kW/m2) [m]	Distance downwind to intensity level 2 (12,5 kW/m2) [m]	Distance downwind to intensity level 3 (7 kW/m2) [m]	Distance downwind to intensity level 4 (5 kW/m2) [m]	Distance downwind to intensity level 5 (3 kW/m2) [m]
3600s\28_Fuga de 100mm do Flash Drum 42-V-003	28_Fuga de 100mm do Flash Drum 42-V-003	1,0/F	22,3246	21,8964	26,6811	29,6907	31,6984	35,2839
		3,7/E	23,214	23,1396	27,5616	30,2273	32,0359	35,2852
		5,0/D	23,5883	23,6354	27,8716	30,3706	32,0746	35,149
3600s\29_Fuga de 10 mm do Flash Drum 42-V-003	29_Fuga de 10 mm do Flash Drum 42-V-003	1,0/F	2,98747	Not reached at height of interest	Not reached at height of interest	2,91909	2,98752	3,20482
		3,7/E	2,95445	Not reached at height of interest	Not reached at height of interest	2,80834	2,92352	3,09621
		5,0/D	2,93197	Not reached at height of interest	Not reached at height of interest	2,6289	2,87674	3,02505
3600s\33_Fuga de 100mm de reservatório 44-D-001	33_Fuga de 100mm de reservatório 44-D-001	1,0/F	34,6168	Not reached at height of interest	Not reached at height of interest	36,3724	36,3724	39,5804
		3,7/E	25,8828	Not reached at height of interest	27,5051	28,046	30,3872	34,2531
		5,0/D	23,88	Not reached at height of interest	25,4235	27,1382	29,3431	33,0003
3600s\34_Fuga de 10mm de reservatório 44-D-001	34_Fuga de 10mm de reservatório 44-D-001	1,0/F	9,07551	Not reached at height of interest	Not reached at height of interest	Not reached at height of interest	10,1567	10,1567
		3,7/E	6,70416	Not reached at height of interest	Not reached at height of interest	7,51503	7,51503	7,96311

		5,0/D	6,22702	Not reached at height of interest	6,97126	6,97126	6,97126	7,76714
3600s\44_Fuga de 100mm de reservatório 01-45-D-001A	44_Fuga de 100mm de reservatório 01-45-D-001A	1,0/F	40,4954	Not reached at height of interest	Not reached at height of interest	42,332	42,497	47,3502
		3,7/E	30,0607	Not reached at height of interest	31,7991	32,96	35,806	40,4418
		5,0/D	27,721	Not reached at height of interest	29,3734	31,8789	34,52	38,924
3600s\45_Fuga de 10mm de reservatório 01-45-D-001A	45_Fuga de 10mm de reservatório 01-45-D-001A	1,0/F	10,8411	Not reached at height of interest	Not reached at height of interest	12,0642	12,0642	12,0642
		3,7/E	8,01005	Not reached at height of interest	Not reached at height of interest	8,98536	8,98536	9,74138
		5,0/D	7,42356	Not reached at height of interest	8,31888	8,31888	8,35317	9,43208
3600s\47_Fuga de 100mm de reservatório 01-57-D-001A	47_Fuga de 100mm de reservatório 01-57-D-001A	1,0/F	9,70343	10,8524	12,5049	14,2572	15,4417	17,5465
		3,7/E	7,26399	8,36226	10,8793	12,597	13,7863	15,9481
		5,0/D	6,71569	8,0873	10,4958	12,1751	13,348	15,4868
3600s\48_Fuga de 10mm de reservatório 01-57-D-001A	48_Fuga de 10mm de reservatório 01-57-D-001A	1,0/F	2,54695	2,83785	2,99341	3,42983	3,70438	4,18314
		3,7/E	1,89528	2,11418	2,58792	2,98292	3,24882	3,73091
		5,0/D	1,76771	1,9687	2,52087	2,90737	3,16943	3,64847
3600s\54_Fuga de 100 mm numa Cisterna com	54_Fuga de 100 mm numa	1,0/F	30,6001	Not reached at height of interest	Not reached at height of interest	32,36	32,36	33,2182

Metanol

Cisterna com
Metanol

		3,7/E	22,2185	Not reached at height of interest	23,6725	23,7654	25,6024	28,6604
		5,0/D	19,3765	Not reached at height of interest	20,737	21,6386	23,2626	25,9493
3600s\55_Fuga de 10 mm numa Cisterna com Metanol	55_Fuga de 10 mm numa Cisterna com Metanol	1,0/F	6,43463	Not reached at height of interest	Not reached at height of interest	Not reached at height of interest	Not reached at height of interest	7,21773
		3,7/E	4,74909	Not reached at height of interest	Not reached at height of interest	5,30206	5,30206	5,4235
		5,0/D	4,40018	Not reached at height of interest	Not reached at height of interest	4,90332	4,90332	5,278
3600s\63_Fuga de 100 mm numa Cisterna com Fusel óleo	63_Fuga de 100 mm numa Cisterna com Fusel óleo	1,0/F	6,89999	7,74082	8,16431	9,37865	10,173	11,5621
		3,7/E	5,13427	5,73152	7,19705	8,24016	8,95567	10,2511
		5,0/D	4,49575	5,14899	6,53373	7,48106	8,13493	9,32815
3600s\64_Fuga de 10 mm numa Cisterna com Fusel óleo	64_Fuga de 10 mm numa Cisterna com Fusel óleo	1,0/F	1,46033	Not reached at height of interest	1,62554	1,77213	1,92241	2,17678
		3,7/E	1,08107	1,19298	1,36137	1,5542	1,68161	1,90376
		5,0/D	1,006	1,10684	1,32104	1,50541	1,62656	1,84554
3600s\65_Rotura do troço aéreo a jusante da PRM	Short pipe	1,0/F	8,16458	8,93257	8,93257	8,93257	8,93257	8,93257
		3,7/E	10,9452	Not reached at height of interest	11,9452	11,9452	11,9452	11,9452
		5,0/D	10,8675	Not reached at height of interest	11,8675	11,8675	11,8675	11,8675
3600s\66_Fuga do	Leak	1,0/F	1,79691	Not reached	Not reached	Not reached	Not reached	1,76847

troço aéreo a jusante da PRM				at height of interest	at height of interest	at height of interest	at height of interest	
		3,7/E	1,77378	Not reached at height of interest	Not reached at height of interest	Not reached at height of interest	Not reached at height of interest	1,70062
		5,0/D	1,75921	Not reached at height of interest	Not reached at height of interest	Not reached at height of interest	Not reached at height of interest	1,62636

Early Pool Fire Results

Distance downwind to defined radiation levels

The reported radiations are defined in the parameters

Path	Scenario	Weather	Pool diameter [m]	Distance downwind to intensity level 1 (37,5 kW/m2) [m]	Distance downwind to intensity level 2 (12,5 kW/m2) [m]	Distance downwind to intensity level 3 (7 kW/m2) [m]	Distance downwind to intensity level 4 (5 kW/m2) [m]	Distance downwind to intensity level 5 (3 kW/m2) [m]
3600s\33_Fuga de 100mm de reservatório 44-D-001	33_Fuga de 100mm de reservatório 44-D-001	1,0/F	26,9419	14,4709	21,6423	29,2563	33,879	41,8257
		3,7/E	26,9405	14,4702	26,4497	32,4326	36,1865	43,6141
		5,0/D	26,943	14,4715	27,1408	32,493	36,4907	43,5236
3600s\34_Fuga de 10mm de reservatório 44-D-001	34_Fuga de 10mm de reservatório 44-D-001	1,0/F	7,56925	Not reached at height of interest	7,81663	10,8225	12,4508	15,0873
		3,7/E	7,61977	Not reached at height of interest	9,75363	12,4029	13,5867	15,9637
		5,0/D	7,65738	Not reached at height of interest	10,3379	12,5619	13,7787	16,0486
3600s\44_Fuga de 100mm de reservatório 01-45-D-001A	44_Fuga de 100mm de reservatório 01-45-D-001A	1,0/F	59,8062	30,9031	47,3405	61,5853	70,6013	86,4301
		3,7/E	59,8127	30,9063	55,0722	66,7624	74,4445	89,4945
		5,0/D	59,8108	30,9054	56,1589	66,775	74,9067	89,3074
3600s\45_Fuga de 10mm de reservatório 01-45-D-001A	45_Fuga de 10mm de reservatório 01-45-D-001A	1,0/F	8,20292	Not reached at height of interest	8,62693	11,7994	13,5361	16,3627
		3,7/E	8,25622	Not reached at height of interest	10,8263	13,4691	14,7384	17,2996
		5,0/D	8,29712	Not reached at height of	11,3879	13,6439	14,9612	17,3977

				interest				
3600s\47_Fuga de 100mm de reservatório 01-57-D-001A	47_Fuga de 100mm de reservatório 01-57-D-001A	1,0/F	14,816	10,4808	17,447	24,2716	29,1382	37,619
		3,7/E	14,8163	11,589	19,9044	28,5495	32,9486	39,9049
		5,0/D	14,8226	11,6461	20,2063	29,1608	33,1586	40,2407
3600s\48_Fuga de 10mm de reservatório 01-57-D-001A	48_Fuga de 10mm de reservatório 01-57-D-001A	1,0/F	3,70614	5,71509	11,4097	14,8438	17,0275	20,7932
		3,7/E	3,75859	6,98501	13,8246	16,5702	18,5287	21,9233
		5,0/D	3,79671	7,33527	14,0813	16,846	18,6675	21,8757
3600s\54_Fuga de 100 mm numa Cisterna com Metanol	54_Fuga de 100 mm numa Cisterna com Metanol	1,0/F	11,2843	Not reached at height of interest	8,92642	12,8708	15,1214	18,8495
		3,7/E	11,289	Not reached at height of interest	11,7263	14,7973	16,4693	19,8896
		5,0/D	11,2847	Not reached at height of interest	12,1886	14,8808	16,6549	19,8642
3600s\55_Fuga de 10 mm numa Cisterna com Metanol	55_Fuga de 10 mm numa Cisterna com Metanol	1,0/F	5,21461	Not reached at height of interest	4,94472	7,27658	8,48551	10,4016
		3,7/E	5,25004	Not reached at height of interest	6,06874	8,54724	9,4067	11,0857
		5,0/D	5,27659	Not reached at height of interest	6,42699	8,68304	9,52106	11,156
3600s\63_Fuga de 100 mm numa Cisterna com Fusel óleo	63_Fuga de 100 mm numa Cisterna com Fusel óleo	1,0/F	11,2853	8,16336	15,3312	21,873	26,2474	33,7189

		3,7/E	11,2854	9,26692	19,4698	25,9899	29,5386	36,0995
		5,0/D	11,2838	9,35348	20,4063	26,3517	29,5446	36,2661
3600s\64_Fuga de 10 mm numa Cisterna com Fusel óleo	64_Fuga de 10 mm numa Cisterna com Fusel óleo	1,0/F	2,34157	3,8071	8,0342	10,4761	12,0321	14,7213
		3,7/E	2,37488	4,89814	9,60384	11,6375	13,0169	15,4351
		5,0/D	2,39906	5,21938	9,75506	11,7742	13,0593	15,3518

Late Pool Fire Results

Distance downwind to defined radiation levels

The reported radiations are defined in the parameters

Path	Scenario	Weather	Pool diameter [m]	Distance downwind to intensity level 1 (37,5 kW/m2) [m]	Distance downwind to intensity level 2 (12,5 kW/m2) [m]	Distance downwind to intensity level 3 (7 kW/m2) [m]	Distance downwind to intensity level 4 (5 kW/m2) [m]	Distance downwind to intensity level 5 (3 kW/m2) [m]
3600s\32_Rotura catastrófica de reservatório 44-D-001	32_Rotura catastrófica de reservatório 44-D-001	1,0/F	26,9409	14,4705	21,6415	29,2554	33,8779	41,8244
		3,7/E	26,941	14,4705	26,4501	32,4332	36,1871	43,6148
		5,0/D	26,9454	14,4727	27,143	32,4957	36,4936	43,5271
3600s\33_Fuga de 100mm de reservatório 44-D-001	33_Fuga de 100mm de reservatório 44-D-001	1,0/F	26,9419	14,4709	21,6423	29,2563	33,879	41,8257
		3,7/E	26,9405	14,4702	26,4497	32,4326	36,1865	43,6141
		5,0/D	26,943	14,4715	27,1408	32,493	36,4907	43,5236
3600s\34_Fuga de 10mm de reservatório 44-D-001	34_Fuga de 10mm de reservatório 44-D-001	1,0/F	24,5309	Not reached at height of interest	20,9153	27,9973	32,2718	39,5971
		3,7/E	22,913	Not reached at height of interest	24,7853	30,0289	33,2649	39,6952
		5,0/D	22,8132	Not reached at height of interest	25,3472	30,0046	33,4396	39,4917
3600s\43_Rotura catastrófica de reservatório 01-45-D-001A	43_Rotura catastrófica de reservatório 01-45-D-001A	1,0/F	59,8126	30,9063	47,3454	61,5913	70,6082	86,4384
		3,7/E	59,8063	30,9031	55,0668	66,756	74,4374	89,4859
		5,0/D	59,8154	30,9077	56,1628	66,7796	74,9118	89,3135
3600s\44_Fuga de 100mm de	44_Fuga de 100mm de	1,0/F	59,8062	30,9031	47,3405	61,5853	70,6013	86,4301

reservatório 01-45- reservatório
D-001A 01-45-D-
001A

		3,7/E	59,8127	30,9063	55,0722	66,7624	74,4445	89,4945
		5,0/D	59,8108	30,9054	56,1589	66,775	74,9067	89,3074
3600s\45_Fuga de 10mm de reservatório 01-45- D-001A	45_Fuga de 10mm de reservatório 01-45-D- 001A	1,0/F	26,6689	16,6353	23,725	31,2791	35,8626	43,7393
		3,7/E	24,9191	15,7607	26,9105	32,5259	36,0222	42,9506
		5,0/D	24,8178	15,7433	27,5136	32,5099	36,2191	42,7494
3600s\46_Rotura catastrófica de reservatório 01-57- D-001A	46_Rotura catastrófica de reservatório 01-57-D- 001A	1,0/F	14,8182	10,4822	17,4483	24,273	29,1399	37,6212
		3,7/E	14,8245	11,5945	19,9065	28,5543	32,9554	39,9142
		5,0/D	14,8178	11,643	20,2055	29,1578	33,1544	40,2363
3600s\47_Fuga de 100mm de reservatório 01-57- D-001A	47_Fuga de 100mm de reservatório 01-57-D- 001A	1,0/F	14,816	10,4808	17,447	24,2716	29,1382	37,619
		3,7/E	14,8163	11,589	19,9044	28,5495	32,9486	39,9049
		5,0/D	14,8226	11,6461	20,2063	29,1608	33,1586	40,2407
3600s\48_Fuga de 10mm de reservatório 01-57- D-001A	48_Fuga de 10mm de reservatório 01-57-D- 001A	1,0/F	14,8168	10,4813	17,4475	24,2721	29,1388	37,6197
		3,7/E	14,8158	11,5887	19,9043	28,5493	32,9482	39,9044
		5,0/D	14,8166	11,6423	20,2053	29,1571	33,1534	40,2352
3600s\53_Rotura de Cisterna com Metanol	53_Rotura de Cisterna com Metanol	1,0/F	11,2851	Not reached at height of interest	8,92708	12,8717	15,1224	18,8507
		3,7/E	11,2841	Not reached at height of interest	11,7214	14,7916	16,4629	19,8819
		5,0/D	11,2842	Not reached	12,1881	14,8803	16,6543	19,8634

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				at height of interest				
3600s\54_Fuga de 100 mm numa Cisterna com Metanol	54_Fuga de 100 mm numa Cisterna com Metanol	1,0/F	11,2843	Not reached at height of interest	8,92642	12,8708	15,1214	18,8495
		3,7/E	11,289	Not reached at height of interest	11,7263	14,7973	16,4693	19,8896
		5,0/D	11,2847	Not reached at height of interest	12,1886	14,8808	16,6549	19,8642
3600s\55_Fuga de 10 mm numa Cisterna com Metanol	55_Fuga de 10 mm numa Cisterna com Metanol	1,0/F	11,2855	Not reached at height of interest	8,92747	12,8722	15,1229	18,8514
		3,7/E	11,2847	Not reached at height of interest	11,7221	14,7923	16,4637	19,8829
		5,0/D	11,2847	Not reached at height of interest	12,1886	14,8809	16,655	19,8643
3600s\62_Rotura de Cisterna com Fusel óleo	62_Rotura de Cisterna com Fusel óleo	1,0/F	11,2844	8,16269	15,3306	21,8723	26,2465	33,7177
		3,7/E	11,284	9,26587	19,4695	25,9886	29,5369	36,0976
		5,0/D	11,2841	9,35368	20,4064	26,352	29,5449	36,2665
3600s\63_Fuga de 100 mm numa Cisterna com Fusel óleo	63_Fuga de 100 mm numa Cisterna com Fusel óleo	1,0/F	11,2853	8,16336	15,3312	21,873	26,2474	33,7189
		3,7/E	11,2854	9,26692	19,4698	25,9899	29,5386	36,0995
		5,0/D	11,2838	9,35348	20,4063	26,3517	29,5446	36,2661
3600s\64_Fuga de 10 mm numa Cisterna com Fusel óleo	64_Fuga de 10 mm numa Cisterna com Fusel óleo	1,0/F	11,2838	8,16232	15,3303	21,8719	26,246	33,717
		3,7/E	11,2842	9,26603	19,4695	25,9888	29,5372	36,0979

5,0/D	11,2851	9,35437	20,4066	26,353	29,5458	36,2679
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Fireball Results

Distance downwind to defined radiation levels

The reported radiations are defined in the parameters

Path	Scenario	Weather	Fireball diameter [m]	Distance downwind to intensity level 1 (37,5 kW/m2) [m]	Distance downwind to intensity level 2 (12,5 kW/m2) [m]	Distance downwind to intensity level 3 (7 kW/m2) [m]	Distance downwind to intensity level 4 (5 kW/m2) [m]	Distance downwind to intensity level 5 (3 kW/m2) [m]
3600s\27_Rotura Catastrófica do Flash Drum 42-V-003	27_Rotura Catastrófica do Flash Drum 42-V-003	1,0/F	74,3211	64,965	118,532	158,178	186,206	237,582
		3,7/E	74,3211	66,1625	120,743	161,272	189,968	242,65
		5,0/D	74,3211	66,5451	121,453	162,266	191,178	244,282

Flash Fire Results

Distance downwind to defined concentrations

The reported LFL and LFL fraction are defined in the respective material property

Path	Scenario	Weather	Distance downwind to LFL [m]	Distance downwind to LFL Fraction [m]
3600s\27_Rotura Catastrófica do Flash Drum 42-V-003	27_Rotura Catastrófica do Flash Drum 42-V-003	1,0/F	24,9274	32,3439
		3,7/E	26,0888	41,5717
		5,0/D	26,9708	47,4915
3600s\28_Fuga de 100mm do Flash Drum 42-V-003	28_Fuga de 100mm do Flash Drum 42-V-003	1,0/F	16,1151	19,0824
		3,7/E	22,5516	28,1247
		5,0/D	26,2692	33,5562
3600s\29_Fuga de 10 mm do Flash Drum 42-V-003	29_Fuga de 10 mm do Flash Drum 42-V-003	1,0/F	2,80495	5,66136
		3,7/E	2,50148	6,51449
		5,0/D	1,98921	6,27896
3600s\32_Rotura catastrófica de reservatório 44-D-001	32_Rotura catastrófica de reservatório 44-D-001	1,0/F	8,71339	14,5871
		3,7/E	12,0079	26,7545
		5,0/D	11,9319	28,0978
3600s\33_Fuga de 100mm de reservatório 44-D-001	33_Fuga de 100mm de reservatório 44-D-001	1,0/F	10,7451	24,4092
		3,7/E	8,28658	19,5078
		5,0/D	7,44338	16,3378
3600s\34_Fuga de 10mm de reservatório 44-D-001	34_Fuga de 10mm de reservatório 44-D-001	1,0/F	2,77761	9,66761
		3,7/E	2,47996	2,78405
		5,0/D	2,35088	2,56043
3600s\43_Rotura catastrófica de reservatório 01-45-D-001A	43_Rotura catastrófica de reservatório 01-45-D-001A	1,0/F	20,2985	33,1356
		3,7/E	18,5141	39,2378
		5,0/D	17,0671	40,3359
3600s\44_Fuga de 100mm de reservatório 01-45-D-001A	44_Fuga de 100mm de reservatório 01-45-D-001A	1,0/F	14,5492	34,6191

		3,7/E	10,6122	23,1075
		5,0/D	8,52503	19,6018
3600s\45_Fuga de 10mm de reservatório 01-45-D-001A	45_Fuga de 10mm de reservatório 01-45-D-001A	1,0/F	3,16987	10,4575
		3,7/E	2,84645	3,22284
		5,0/D	2,70616	2,96907
3600s\46_Rotura catastrófica de reservatório 01-57-D-001A	46_Rotura catastrófica de reservatório 01-57-D-001A	1,0/F	3,20162	3,20398
		3,7/E	3,41897	3,41952
		5,0/D	3,5896	3,58983
3600s\47_Fuga de 100mm de reservatório 01-57-D-001A	47_Fuga de 100mm de reservatório 01-57-D-001A	1,0/F	7,92831	8,62024
		3,7/E	6,50074	7,00542
		5,0/D	5,78738	6,17323
3600s\48_Fuga de 10mm de reservatório 01-57-D-001A	48_Fuga de 10mm de reservatório 01-57-D-001A	1,0/F	3,54765	3,86374
		3,7/E	3,01276	3,20822
		5,0/D	2,79319	2,93157
3600s\53_Rotura de Cisterna com Metanol	53_Rotura de Cisterna com Metanol	1,0/F	7,05767	17,9748
		3,7/E	9,58002	20,4747
		5,0/D	8,16063	15,8225
3600s\54_Fuga de 100 mm numa Cisterna com Metanol	54_Fuga de 100 mm numa Cisterna com Metanol	1,0/F	10,2462	13,5106
		3,7/E	9,12867	12,6504
		5,0/D	7,28314	11,0331
3600s\55_Fuga de 10 mm numa Cisterna com Metanol	55_Fuga de 10 mm numa Cisterna com Metanol	1,0/F	2,11226	6,90636
		3,7/E	1,42291	1,61966
		5,0/D	1,31906	1,44034
3600s\62_Rotura de Cisterna com Fusel óleo	62_Rotura de Cisterna com Fusel óleo	1,0/F	3,44725	11,9055
		3,7/E	3,42227	5,6127

		5,0/D	3,73996	3,75553
3600s\63_Fuga de 100 mm numa Cisterna com Fusel óleo	63_Fuga de 100 mm numa Cisterna com Fusel óleo	1,0/F	3,8157	7,69477
		3,7/E	3,15578	6,28876
		5,0/D	2,27432	4,56041
3600s\64_Fuga de 10 mm numa Cisterna com Fusel óleo	64_Fuga de 10 mm numa Cisterna com Fusel óleo	1,0/F	1,91141	2,06352
		3,7/E	1,54845	1,63696
		5,0/D	1,40205	1,46371
3600s\65_Rotura do troço aéreo a jusante da PRM	Short pipe	1,0/F	3,64868	4,37988
		3,7/E	4,65851	6,15979
		5,0/D	5,15743	7,19752
3600s\66_Fuga do troço aéreo a jusante da PRM	Leak	1,0/F		2,05428
		3,7/E		1,33282
		5,0/D		

Maximum distance to LFL fraction at any height

Path	Scenario	Weather	Max flash fire distance [m]	Height of the max flash fire distance [m]	Time [s]
3600s\27_Rotura Catastrófica do Flash Drum 42-V-003	27_Rotura Catastrófica do Flash Drum 42-V-003	1,0/F	31,8648	0,671904	0,910351
		3,7/E	41,4344	2,02533	4,90981
		5,0/D	46,9904	2,67058	5,86377
3600s\28_Fuga de 100mm do Flash Drum 42-V-003	28_Fuga de 100mm do Flash Drum 42-V-003	1,0/F	27,5838	7,0321	545,391
		3,7/E	36,0192	3,98158	544,603
		5,0/D	42,1431	3,73907	276,298
3600s\29_Fuga de 10 mm do Flash Drum 42-V-003	29_Fuga de 10 mm do Flash Drum 42-V-003	1,0/F	6,12075	0,333272	3549,1
		3,7/E	7,01212	0,246582	3549,16

		5,0/D	6,78172	0,170399	1800,25
3600s\32_Rotura catastrófica de reservatório 44-D-001	32_Rotura catastrófica de reservatório 44-D-001	1,0/F	14,4902	0	19,2614
		3,7/E	25,5851	0	12,6523
		5,0/D	26,1596	0	7,91896
3600s\33_Fuga de 100mm de reservatório 44-D-001	33_Fuga de 100mm de reservatório 44-D-001	1,0/F	24,3934	0	1810,26
		3,7/E	19,5325	0,172494	26,9682
		5,0/D	16,6302	0,211335	11,1594
3600s\34_Fuga de 10mm de reservatório 44-D-001	34_Fuga de 10mm de reservatório 44-D-001	1,0/F	9,61312	0	3416,19
		3,7/E	2,66399	0,0804407	780,355
		5,0/D	2,38317	0,0799444	1,29937
3600s\43_Rotura catastrófica de reservatório 01-45-D-001A	43_Rotura catastrófica de reservatório 01-45-D-001A	1,0/F	33,0272	0	33,2285
		3,7/E	37,7082	0	16,8774
		5,0/D	37,8554	0	9,97725
3600s\44_Fuga de 100mm de reservatório 01-45-D-001A	44_Fuga de 100mm de reservatório 01-45-D-001A	1,0/F	34,4329	0	793,167
		3,7/E	23,1304	0,0455358	339,089
		5,0/D	19,8133	0,188879	338,97
3600s\45_Fuga de 10mm de reservatório 01-45-D-001A	45_Fuga de 10mm de reservatório 01-45-D-001A	1,0/F	10,4021	0	3417,29
		3,7/E	3,24641	0,0807296	338,825
		5,0/D	2,90067	0,0812931	1,29936
3600s\46_Rotura catastrófica de reservatório 01-57-D-001A	46_Rotura catastrófica de reservatório 01-57-D-001A	1,0/F	2,81584	0,154084	1E-08
		3,7/E	3,84292	0	0,13
		5,0/D	3,86698	0	0,1
3600s\47_Fuga de 100mm	47_Fuga de 100mm	1,0/F	8,28512	0,0594952	1088,02

de reservatório 01-57-D-001A

de reservatório 01-57-D-001A

		3,7/E	6,8032	0,0611046	1088,02
		5,0/D	5,96415	0,0629223	1,46494
3600s\48_Fuga de 10mm de reservatório 01-57-D-001A	48_Fuga de 10mm de reservatório 01-57-D-001A	1,0/F	3,93637	0,0540135	71,4944
		3,7/E	3,25572	0,0549192	3548,72
		5,0/D	2,92088	0,0558204	7,51436
3600s\53_Rotura de Cisterna com Metanol	53_Rotura de Cisterna com Metanol	1,0/F	16,1874	0	42,8189
		3,7/E	19,2071	0	10,645
		5,0/D	15,2571	0	5,20796
3600s\54_Fuga de 100 mm numa Cisterna com Metanol	54_Fuga de 100 mm numa Cisterna com Metanol	1,0/F	15,088	1,05457	478,141
		3,7/E	14,197	0,807943	380,832
		5,0/D	11,7066	0,283135	11,7766
3600s\55_Fuga de 10 mm numa Cisterna com Metanol	55_Fuga de 10 mm numa Cisterna com Metanol	1,0/F	6,77303	0	1798,53
		3,7/E	1,66307	0,0668128	780,365
		5,0/D	1,58718	0,0337334	1,29936
3600s\62_Rotura de Cisterna com Fusel óleo	62_Rotura de Cisterna com Fusel óleo	1,0/F	11,204	0	35,5801
		3,7/E	5,53346	0	2,90031
		5,0/D	3,70401	0	0,2
3600s\63_Fuga de 100 mm numa Cisterna com Fusel óleo	63_Fuga de 100 mm numa Cisterna com Fusel óleo	1,0/F	7,86893	0,280659	74,1365
		3,7/E	6,49205	0,145554	12,3448
		5,0/D	4,69372	0,0781153	830,323
3600s\64_Fuga de 10 mm numa Cisterna com Fusel óleo	64_Fuga de 10 mm numa Cisterna com Fusel óleo	1,0/F	2,25418	0,0464979	3548,72
		3,7/E	1,79334	0,0479864	3548,72
		5,0/D	1,6591	0,0490275	3548,72

3600s\65_Rotura do troço aéreo a jusante da PRM	Short pipe	1,0/F	6,50986	1,59344	23,8508
		3,7/E	7,84519	0,92968	7,51535
		5,0/D	9,05817	0,731204	7,51529
3600s\66_Fuga do troço aéreo a jusante da PRM	Leak	1,0/F	2,40131	0,126592	7,51434
		3,7/E	1,96957	0,100315	1,91793
		5,0/D	1,66178	0,11237	1,91793

Explosion Results

Explosion scenarios for worst-case maximum downwind distance to defined overpressures.

These results are produced during the consequence run and depend on the precise setting of the scenario.

These results may be quite different to the explosion results calculated during the risk or effects modelling as these will depend on the obstructed regions defined on the map.

The reported overpressures are defined in the explosion parameters

Path	Scenario	Weather	Overpressure level [bar]	Maximum distance [m]	Diameter [m]
3600s\27_Rotura Catastrófica do Flash Drum 42-V-003	27_Rotura Catastrófica do Flash Drum 42-V- 003	1,0/F	0,3	116,442	172,885
			0,14	195,166	330,332
			0,05	434,683	809,365
			0,03	671,146	1282,29
		3,7/E	0,3	117,608	175,217
			0,14	197,394	334,788
			0,05	440,141	820,283
			0,03	679,795	1299,59
		5,0/D	0,3	118,434	176,869
			0,14	198,972	337,945
			0,05	444,009	828,017
			0,03	685,921	1311,84
3600s\28_Fuga de 100mm do Flash Drum 42-V-003	28_Fuga de 100mm do Flash Drum 42-V-003	1,0/F	0,3	35,1157	30,2314
			0,14	48,8817	57,7634
			0,05	90,7647	141,529
			0,03	132,114	224,228
		3,7/E	0,3	45,8472	31,6944
			0,14	60,2794	60,5589
			0,05	104,189	148,379
			0,03	147,54	235,079
		5,0/D	0,3	54,8609	29,7217
			0,14	68,3948	56,7895
			0,05	109,572	139,143
			0,03	150,224	220,447
3600s\32_Rotura catastrófica de reservatório 44-D-001	32_Rotura catastrófica de reservatório 44-D- 001	1,0/F	0,3	20,3327	20,6655
			0,14	29,7429	39,4858
			0,05	58,3731	96,7463
			0,03	86,6385	153,277
		3,7/E	0,3	19,7411	19,4822
			0,14	28,6124	37,2249
			0,05	55,6034	91,2068
			0,03	82,2503	144,501
		5,0/D	0,3	18,7559	17,5118
			0,14	26,7299	33,4599
			0,05	50,991	81,9819

			0,03	74,9427	129,885
3600s\33_Fuga de 100mm de reservatório 44-D-001	33_Fuga de 100mm de reservatório 44-D-001	1,0/F	0,3	23,1482	6,29645
			0,14	26,0153	12,0307
			0,05	34,7385	29,4771
			0,03	43,3505	46,7011
		3,7/E	0,3	12,63	5,25993
			0,14	15,0251	10,0502
			0,05	22,3123	24,6246
			0,03	29,5066	39,0131
		5,0/D	0,3	12,4727	4,94547
			0,14	14,7247	9,44936
			0,05	21,5762	23,1524
			0,03	28,3404	36,6808
3600s\43_Rotura catastrófica de reservatório 01-45-D-001A	43_Rotura catastrófica de reservatório 01-45-D-001A	1,0/F	0,3	46,5146	33,0292
			0,14	62,9416	85,8833
			0,05	125,214	210,428
			0,03	186,692	333,384
		3,7/E	0,3	35,6779	31,3558
			0,14	49,9559	59,9119
			0,05	93,3967	146,793
			0,03	136,284	232,568
		5,0/D	0,3	32,5913	25,1826
			0,14	44,0583	48,1165
			0,05	78,9465	117,893
			0,03	113,39	186,78
3600s\44_Fuga de 100mm de reservatório 01-45-D-001A	44_Fuga de 100mm de reservatório 01-45-D-001A	1,0/F	0,3	35,4197	10,8395
			0,14	40,3556	20,7111
			0,05	55,3728	50,7455
			0,03	70,1985	80,397
		3,7/E	0,3	22,9478	5,89553
			0,14	25,6323	11,2646
			0,05	33,8001	27,6001
			0,03	41,8637	43,7274
		5,0/D	0,3	12,7494	5,49884
			0,14	15,2533	10,5067
			0,05	22,8715	25,743
			0,03	30,3926	40,7851
3600s\45_Fuga de 10mm de reservatório 01-45-D-001A	45_Fuga de 10mm de reservatório 01-45-D-001A	1,0/F	0,3	12,3455	4,6909
			0,14	14,4815	8,96295
			0,05	20,9803	21,9606
			0,03	27,3963	34,7926
3600s\53_Rotura de	53_Rotura de		0,3	No hazard	0

Cisterna com Metanol	Cisterna com Metanol		0,14	No hazard	0
			0,05	No hazard	0
			0,03	No hazard	0
		3,7/E	0,3	14,1195	8,23902
			0,14	17,8712	15,7424
			0,05	29,2856	38,5713
			0,03	40,5546	61,1092
		5,0/D	0,3	11,7443	3,48864
			0,14	13,3329	6,66577
			0,05	18,1661	16,3322
			0,03	22,9377	25,8754
3600s\54_Fuga de 100 mm numa Cisterna com Metanol	54_Fuga de 100 mm numa Cisterna com Metanol	1,0/F	0,3	16,1417	12,2834
			0,14	21,735	23,47
			0,05	38,7526	57,5051
			0,03	55,5532	91,1064
		3,7/E	0,3	14,7068	9,41362
			0,14	18,9933	17,9867
			0,05	32,0351	44,0702
			0,03	44,9106	69,8212
		5,0/D	0,3	13,5336	7,06711
			0,14	16,7516	13,5032
			0,05	26,5425	33,0849
			0,03	36,2085	52,4171
3600s\62_Rotura de Cisterna com Fusel óleo	62_Rotura de Cisterna com Fusel óleo	1,0/F	0,3	No hazard	0
			0,14	No hazard	0
			0,05	No hazard	0
			0,03	No hazard	0

Supplementary data for worst-case explosion scenarios

Path	Scenario	Weather	Overpressure level [bar]	Explosion flammable mass [kg]	Ignition time [s]	Ignition source [m]	Cloud centre [m]	Explosion centre [m]
3600s\27_Rotura Catastrófica do Flash Drum 42-V-003	27_Rotura Catastrófica do Flash Drum 42-V-003	1,0/F	0,3	1245,86	0,347985	30	0,336863	30
			0,14	1245,86	0,347985	30	0,336863	30
			0,05	1245,86	0,347985	30	0,336863	30
			0,03	1245,86	0,347985	30	0,336863	30
		3,7/E	0,3	1296,96	0,286863	30	0,959085	30
			0,14	1296,96	0,286863	30	0,959085	30
			0,05	1296,96	0,286863	30	0,959085	30
			0,03	1296,96	0,286863	30	0,959085	30

		5,0/D	0,3	1333,99	0,262784	30	1,14229	30
			0,14	1333,99	0,262784	30	1,14229	30
			0,05	1333,99	0,262784	30	1,14229	30
			0,03	1333,99	0,262784	30	1,14229	30
3600s\28_Fuga de 100mm do Flash Drum 42-V-003	28_Fuga de 100mm do Flash Drum 42-V-003	1,0/F	0,3	6,66154	2,28312	20	10,2858	20
			0,14	6,66154	2,28312	20	10,2858	20
			0,05	6,66154	2,28312	20	10,2858	20
			0,03	6,66154	2,28312	20	10,2858	20
		3,7/E	0,3	7,67625	3,89298	30	16,0819	30
			0,14	7,67625	3,89298	30	16,0819	30
			0,05	7,67625	3,89298	30	16,0819	30
			0,03	7,67625	3,89298	30	16,0819	30
		5,0/D	0,3	6,33025	8,29132	40	17,9043	40
			0,14	6,33025	8,29132	40	17,9043	40
			0,05	6,33025	8,29132	40	17,9043	40
			0,03	6,33025	8,29132	40	17,9043	40
3600s\32_Rotura catastrófica de reservatório 44-D-001	32_Rotura catastrófica de reservatório 44-D-001	1,0/F	0,3	4,29821	4,40228	10	1,91729	10
			0,14	4,29821	4,40228	10	1,91729	10
			0,05	4,29821	4,40228	10	1,91729	10
			0,03	4,29821	4,40228	10	1,91729	10
		3,7/E	0,3	3,60135	1,84869	10	4,02159	10
			0,14	3,60135	1,84869	10	4,02159	10
			0,05	3,60135	1,84869	10	4,02159	10
			0,03	3,60135	1,84869	10	4,02159	10
		5,0/D	0,3	2,6154	1,324	10	4,60141	10
			0,14	2,6154	1,324	10	4,60141	10
			0,05	2,6154	1,324	10	4,60141	10
			0,03	2,6154	1,324	10	4,60141	10
3600s\33_Fuga de 100mm de reservatório 44-D-001	33_Fuga de 100mm de reservatório 44-D-001	1,0/F	0,3	0,121573	111,295	20	6,10284	20
			0,14	0,121573	111,295	20	6,10284	20
			0,05	0,121573	111,295	20	6,10284	20
			0,03	0,121573	111,295	20	6,10284	20
		3,7/E	0,3	0,0708744	1,52561	10	4,69537	10
			0,14	0,0708744	1,52561	10	4,69537	10
			0,05	0,0708744	1,52561	10	4,69537	10
			0,03	0,0708744	1,52561	10	4,69537	10
		5,0/D	0,3	0,0589077	1,29952	10	4,43703	10
			0,14	0,0589077	1,29952	10	4,43703	10
			0,05	0,0589077	1,29952	10	4,43703	10
			0,03	0,0589077	1,29952	10	4,43703	10
3600s\43_Rotura	43_Rotura	1,0/F	0,3	17,5486	20,033	30	8,60871	30

catastrófica de reservatório 01-45-D-001A	catastrófica de reservatório 01-45-D-001A	0,14	44,2274	4,94989	20	2,97947	20
		0,05	44,2274	4,94989	20	2,97947	20
		0,03	44,2274	4,94989	20	2,97947	20

		3,7/E	0,3	15,0143	3,21613	20	7,93043	20
			0,14	15,0143	3,21613	20	7,93043	20
			0,05	15,0143	3,21613	20	7,93043	20
			0,03	15,0143	3,21613	20	7,93043	20

		5,0/D	0,3	7,77765	2,52855	20	9,59994	20
			0,14	7,77765	2,52855	20	9,59994	20
			0,05	7,77765	2,52855	20	9,59994	20
			0,03	7,77765	2,52855	20	9,59994	20

3600s\44_Fuga de 100mm de reservatório 01-45-D-001A	44_Fuga de 100mm de reservatório 01-45-D-001A	1,0/F	0,3	0,620265	375,82	30	9,86778	30
			0,14	0,620265	375,82	30	9,86778	30
			0,05	0,620265	375,82	30	9,86778	30
			0,03	0,620265	375,82	30	9,86778	30

		3,7/E	0,3	0,0997971	8,46716	20	5,40246	20
			0,14	0,0997971	8,46716	20	5,40246	20
			0,05	0,0997971	8,46716	20	5,40246	20
			0,03	0,0997971	8,46716	20	5,40246	20

		5,0/D	0,3	0,0809771	1,29951	10	5,09598	10
			0,14	0,0809771	1,29951	10	5,09598	10
			0,05	0,0809771	1,29951	10	5,09598	10
			0,03	0,0809771	1,29951	10	5,09598	10

3600s\45_Fuga de 10mm de reservatório 01-45-D-001A	45_Fuga de 10mm de reservatório 01-45-D-001A	1,0/F	0,3	0,0502712	2876,25	10	1,02106	10
			0,14	0,0502712	2876,25	10	1,02106	10
			0,05	0,0502712	2876,25	10	1,02106	10
			0,03	0,0502712	2876,25	10	1,02106	10

3600s\53_Rotura de Cisterna com Metanol	53_Rotura de Cisterna com Metanol		0,3	0	0	No hazard	No hazard	0
			0,14		0	hazard	No hazard	0
			0,05		0	No hazard	No hazard	0
			0,03		0	hazard	No hazard	0

						No hazard		
						No hazard		
						No hazard		
						No hazard		

		3,7/E	0,3	0,272381	4,4306	10	7,4682	10
			0,14	0,272381	4,4306	10	7,4682	10
			0,05	0,272381	4,4306	10	7,4682	10
			0,03	0,272381	4,4306	10	7,4682	10

		5,0/D	0,3	0,0206784	2,68774	10	7,73148	10
			0,14	0,0206784	2,68774	10	7,73148	10
			0,05	0,0206784	2,68774	10	7,73148	10
			0,03	0,0206784	2,68774	10	7,73148	10
3600s\54_Fuga de	54_Fuga de	1,0/F	0,3	0,902617	5,32998	10	5,7905	10
100 mm numa	100 mm		0,14	0,902617	5,32998	10	5,7905	10
Cisterna com	numa		0,05	0,902617	5,32998	10	5,7905	10
Metanol	Cisterna com		0,03	0,902617	5,32998	10	5,7905	10
	Metanol							
		3,7/E	0,3	0,406275	3,46428	10	5,03139	10
			0,14	0,406275	3,46428	10	5,03139	10
			0,05	0,406275	3,46428	10	5,03139	10
			0,03	0,406275	3,46428	10	5,03139	10
		5,0/D	0,3	0,1719	3,47135	10	4,03494	10
			0,14	0,1719	3,47135	10	4,03494	10
			0,05	0,1719	3,47135	10	4,03494	10
			0,03	0,1719	3,47135	10	4,03494	10
3600s\62_Rotura	62_Rotura	1,0/F	0,3	0	0	No	No hazard	0
de Cisterna com	de Cisterna		0,14		0	hazard	No hazard	0
Fusel óleo	com Fusel		0,05		0	No	No hazard	0
	óleo		0,03		0	hazard	No hazard	0
						No		
						hazard		
						No		
						hazard		