

Consequence Summary Report

Workspace: Fuite_gaz_naturel

Study: Study

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.

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]
Study \\Enterrée_DN80_5bar_vertical	Short pipe-rupture_totale	Category 5/D	4,43951	-64,5266	0	0	0,0972783	633,723	3600
		Category 3/F	4,43951	-64,5266	0	0	0,0972783	633,723	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	1	m

Distance downwind to defined concentrations

The reported concentration of interest is defined at the scenario

Path	Scenario	Weather	Material	Material to track	Concentration of interest [ppm]	Averaging time selected	Distance downwind to concentration of interest [m]
Study \Enterrée_DN80_5bar_vertical	Short pipe-rupture_totale	Category 5/D	METHANE	METHANE	20000	User-defined	0,124866
		Category 3/F	METHANE	METHANE	20000	User-defined	

Path	Scenario	Weather	Distance to UFL [m]	Distance to LFL [m]	Distance to LFL fraction [m]
Study \Enterrée_DN80_5bar_vertical	Short pipe-rupture_totale	Category 5/D	0,0667212	0,0879258	0,0879258
		Category 3/F	0,0697796	0,0792225	0,0792225

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 (3 kW/m ²) [m]	Distance downwind to intensity level 2 (5 kW/m ²) [m]	Distance downwind to intensity level 3 (8 kW/m ²) [m]
Study \\Enterrée_DN80_5bar_vertical	Short pipe-rupture_total	Category 5/D	15,1658	27,4758	20,8368	15,2259
		Category 3/F	17,4607	25,8765	18,2283	10,7896

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]
Study\Enterrée_DN80_5bar_vertical	Short pipe-rupture_totale	Category 5/D	0,0879258	0,0879258
		Category 3/F	0,0792225	0,0792225

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]
Study\Enterrée_DN80_5bar_vertical	Short pipe-rupture_totale	Category 5/D	1,24813	8,16856	1,91794
		Category 3/F	1,07726	9,38264	1,91795

Explosion Results

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

The reported overpressures are defined in the explosion parameters

Path	Scenario	Weather	Overpressure level [bar]	Maximum distance [m]	Diameter [m]
Study \Enterrée_DN80_5bar_vertical	Short pipe-rupture_totale	Category 5/D	0,2	2,78279	4,74475
			0,14	3,4694	6,11797
			0,05	7,57764	14,3345
			0,02	16,8181	32,8154
		Category 3/F	0,2	2,55653	4,50259
			0,14	3,2081	5,80573
			0,05	7,10668	13,6029
			0,02	15,8756	31,1407

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]
Study \Enterrée_DN80_5bar_vertical	Short pipe-rupture_totale	Category 5/D	0,2	0,044520	1,91794	1	0,410411	0,410411
			0,14	3	1,91794	1	0,410411	0,410411
			0,05	0,044520	1,91794	1	0,410411	0,410411
			0,02	3	1,91794	1	0,410411	0,410411
				0,044520				
				3				
				0,044520				
				3				
		Category 3/F	0,2	0,038045	1,91795	1	0,305231	0,305231
			0,14	9	1,91795	1	0,305231	0,305231
			0,05	0,038045	1,91795	1	0,305231	0,305231
			0,02	9	1,91795	1	0,305231	0,305231
				0,038045				
				9				
				0,038045				
				9				

