

# Input Report

## Workspace: 72438-2FSRURegas-6H

### FSRU in rigassificazione

Study

72438-2FSRURegas-6H

Tab	Group	Field	Value	Units
Context of calculations	Selection of context	Weathers to use for this study	Weather folder	
		Parameters to use for this study	Parameter set	
		Obstructions to use for this study		
Bund, building and terrain	Terrain and bund definition	Type of terrain for dispersion	Default terrain	
		Type of pool substrate and bunds	No bund	
Toxic parameters	Indoor toxic calculations	Specify the downwind building type	Unselected	
		Building type (downwind building type)		
Dispersion	Distances of interest	Distances of interest		m

## 6H Vaporizz GN/SW HA1100A

Pressure vessel

72438-2FSRURegas-6H\FSRU in rigassificazione

Tab	Group	Field	Value	Units
Material	Material	Material	NG/SW	
		Specify volume inventory?	Yes	
		Mass inventory	20120,6	kg
		Volume inventory	21	m3
		Material to track	METHANE	
	Phase	Specified condition	Pressure/temperature	
		Temperature	5	degC
		Pressure (gauge)	120	bar
		Fluid state	Liquid	
		Liquid mole fraction	1	fraction
Scenario	Pipe dimensions	Pipe length		m
	Release location	Elevation	5	m
		Tank head	0	m
	Direction	Outdoor release direction	Horizontal	
		Outdoor release angle	0	deg
Discharge parameters	Model settings	Atmospheric expansion method	DNV recommended	
		Phase change upstream of orifice?	Disallow liquid phase change only (metastable liquid)	
	Droplet break-up mechanism	Droplet break-up mechanism - instantaneous	Use flashing correlation	
		Droplet break-up mechanism - continuous	Do not force correlation	

Short pipe	Pipe characteristics	Pipe roughness	0,045	mm
	Frequencies	Frequency of bends in pipe	0	/m
		Frequency of couplings in pipe	0	/m
		Frequency of junctions in pipe	0	/m
	Frequencies of valves	Frequency of excess flow valves	0	/m
		Frequency of non-return valves	0	/m
		Frequency of shut-off valves	0	/m
	Velocity head losses	Excess flow valve velocity head losses	0	
		Non-return valve velocity head losses	0	
		Shut-off valve velocity head losses	0	
Time varying releases	Modelling of time-varying leaks and line ruptures	Vacuum relief valve	Operating	
		Vacuum relief valve set point	0	bar
	Inventory data for time-varying releases	Tank volume	21	m <sup>3</sup>
		Tank vapour volume	0	m <sup>3</sup>
		Tank liquid volume	21	m <sup>3</sup>
		Tank liquid level	0	m

		Maximum vapour release height	0	m
		Minimum mass inventory	0,1	kg
		Maximum mass inventory	1E+09	kg
	Safety system modelling for time-varying releases	Safety system modelling (isolation and blowdown)	No	
Dispersion	Dispersion scope	Concentration of interest	22772,9	ppm
		Averaging time for concentration of interest	User-defined	
		Specify user-defined averaging time	Yes	
		User defined averaging time	3600	s
	Distances of interest	Distances of interest		m
	Averaging time for reports	ERPG [1 hr]	No	
		IDLH [30 mins]	No	
		STEL [15 mins]	No	
Bund, building and terrain	Terrain and bund definition	Type of terrain for dispersion	Default terrain	
		Type of pool substrate and bunds	No bund	
	Building definition	Release building		
		In-building release?	Outdoor	
		Building wake effect	None	
		Wind or release	0	deg



		angle from North		
		Handling of droplets	Trapped	
		Indoor mass modification factor	3	
Geometry	Geometry	East	0	m
		North	0	m

## 280mm

Leak

72438-2FSRURegas-6H\FSRU in rigassificazione\6H Vaporizz GN/SW HA1100A

Tab	Group	Field	Value	Units
Scenario	Hole	Orifice diameter	280	mm
		Use specified discharge coefficient?	Yes	
		Discharge coefficient	0,62	fraction
	Release location	Elevation	5	m
		Tank head	0	m
	Direction	Outdoor release direction	Horizontal	
		Outdoor release angle	0	deg
Material	Material	Material characteristics	Inert	
		Material to track	METHANE	
		Type of risk effects to model	Inert	
	Phase	Phase to be released	Liquid	
Discharge parameters	Model settings	Atmospheric expansion method	DNV recommended	
		Phase change upstream of orifice?	Disallow liquid phase change only (metastable liquid)	
	Droplet break-up mechanism	Droplet break-up mechanism - continuous	Do not force correlation	
Dispersion	Dispersion scope	Concentration of interest	22772,9	ppm
		Averaging time for concentration of interest	User-defined	
		Specify user-defined averaging time	Yes	

		User defined averaging time	3600	s
	Distances of interest	Distances of interest		m
	Averaging time for reports	ERPG [1 hr]	No	
		IDLH [30 mins]	No	
		STEL [15 mins]	No	
Bund, building and terrain	Terrain and bund definition	Type of terrain for dispersion	Default terrain	
		Type of pool substrate and bunds	No bund	

