

# Discharge Report

**Workspace: 72438-2FSRURegas-9R**

**Study: FSRU in rigassificazione-ME7**

**Equipment Item: 9Rb Compressore BOG LD**

72438-2FSRURegas-9R\FSRU in rigassificazione-ME7\9Rb Compressore BOG LD

Material	<b>GAS NATURALE</b>	
East	0	m
North	0	m

## Scenario (Leak) : 25mm

72438-2FSRURegas-9R\FSRU in rigassificazione-ME7\9Rb Compressore BOG LD\25mm

**Weather: Category 2/F**

### INPUT DATA

#### Inventory data

Mass in vessel	<b>23,1373</b>	kg
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#### Stagnation Data (upstream end for long pipe)

Initial pressure (gauge)	<b>7,5</b>	bar
Initial temperature	<b>45</b>	degC
Fluid state	<b>Pressurized gas</b>	

#### Scenario data

Phase to be released	Vapour	
Hole diameter	<b>25</b>	mm
Discharge coefficient	<b>0,62</b>	fraction

### OUTPUT DATA

Mass flow rate	0,453325	kg/s
Release duration	51,0391	s

#### Orifice or pipe exit data (before atmospheric expansion)



Pressure	4,66424	bar
Temperature	5,41097	degC
Liquid mass fraction	<b>0</b>	fraction
Velocity at vena contracta (at exit for pipe releases)	402,882	m/s
Discharge coefficient	0,62	

### **Final Data (after atmospheric expansion)**

Temperature	20,43	degC
Liquid mass fraction	0	fraction
Droplet diameter	0	um
Expanded diameter	<b>0,0505286</b>	m
Velocity	300	m/s



## Weather: Category 5/D

### INPUT DATA

#### Inventory data

Mass in vessel	23,1373	kg
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#### Stagnation Data (upstream end for long pipe)

Initial pressure (gauge)	7,5	bar
Initial temperature	45	degC
Fluid state	Pressurized gas	

#### Scenario data

Phase to be released	Vapour	
Hole diameter	25	mm
Discharge coefficient	0,62	fraction

### OUTPUT DATA

Mass flow rate	0,453325	kg/s
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#### Orifice or pipe exit data (before atmospheric expansion)

Pressure	4,66424	bar
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Liquid mass fraction	0	fraction
Velocity at vena contracta (at exit for pipe releases)	402,882	m/s
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#### Final Data (after atmospheric expansion)

Temperature	20,43	degC
Liquid mass fraction	0	fraction
Droplet diameter	0	um
Expanded diameter	0,0505286	m
Velocity	300	m/s



