

# Emissions Report for SimV2

diciembre 10, 2021

## 1. OVERALL PROCESS DATA

Batch Time	99.65	h
Batch Size	104.91	kg MP
Number of Batches per Year	79.00	

MP = Flow of Component 'Pheromone' in Stream 'PHERO'

## 2. PROCEDURE-AVERAGED EMISSION CATEGORY RATES

Source	P-7		P-4	
Designation	FR-103		FR-102	
Category	Actual	Permit	Actual	Permit
Subcategory	Maximum	Allowable	Maximum	Allowable
	(kg/h)	(kg/h)	(kg/h)	(kg/h)
Total Particulate	0.00	0.23	0.00	0.23
Biological	0.00	0.00	0.00	0.00
Radionuclide	0.00	0.00	0.00	0.00
Cr6	0.00	0.00	0.00	0.00
Metal	0.00	0.00	0.00	0.00
Asbestos	0.00	0.00	0.00	0.00
Dioxin	0.00	0.00	0.00	0.00
LOC	0.00	0.00	0.00	0.00
HAP-Particulate	0.00	0.00	0.00	0.00
Other Particulate	0.00	0.00	0.00	0.00
Total VOC	0.00	0.00	0.00	0.00
VCM	0.00	0.00	0.00	0.00
TVOS	0.00	0.00	0.00	0.00
EVOS	0.00	0.00	0.00	0.00
HAP-VOC	0.00	0.00	0.00	0.00
Other VOC	0.00	0.00	0.00	0.00
Acid Gases	0.00	0.00	0.00	0.00
HAP-Acid	0.00	0.00	0.00	0.00
Acid	0.00	0.00	0.00	0.00
ETG	0.00	0.00	0.00	0.00
HAP-Gas	0.00	0.00	0.00	0.00
Non-HAP	0.00	0.00	0.00	0.00
CO	0.00	0.00	0.00	0.00
NOx	0.00	0.00	0.00	0.00
SO2	0.00	0.00	0.00	0.00
BASE	0.00	0.00	0.00	0.00

<b>Source</b>	<b>P-1</b>	
<b>Designation</b>	<b>FR-101</b>	
<b>Category</b>	<b>Actual</b>	<b>Permit</b>
<b>Subcategory</b>	<b>Maximum</b>	<b>Allowable</b>
	<b>(kg/h)</b>	<b>(kg/h)</b>
<b>Total Particulate</b>	<b>0.00</b>	<b>0.23</b>
Biological	0.00	0.00
Radionuclide	0.00	0.00
Cr6	0.00	0.00
Metal	0.00	0.00
Asbestos	0.00	0.00
Dioxin	0.00	0.00
LOC	0.00	0.00
HAP-Particulate	0.00	0.00
Other Particulate	0.00	0.00
<b>Total VOC</b>	<b>0.00</b>	<b>0.00</b>
VCM	0.00	0.00
TVOS	0.00	0.00
EVOS	0.00	0.00
HAP-VOC	0.00	0.00
Other VOC	0.00	0.00
<b>Acid Gases</b>	<b>0.00</b>	<b>0.00</b>
HAP-Acid	0.00	0.00
Acid	0.00	0.00
<b>ETG</b>	<b>0.00</b>	<b>0.00</b>
HAP-Gas	0.00	0.00
Non-HAP	0.00	0.00
<b>CO</b>	<b>0.00</b>	<b>0.00</b>
<b>NOx</b>	<b>0.00</b>	<b>0.00</b>
<b>SO2</b>	<b>0.00</b>	<b>0.00</b>
<b>BASE</b>	<b>0.00</b>	<b>0.00</b>

### 3. EMISSION CATEGORY TOTALS

Category	
Subcategory	(kg/batch)
Total Particulate	0.00
Biological	0.00
Radionuclide	0.00
Cr6	0.00
Metal	0.00
Asbestos	0.00
Dioxin	0.00
LOC	0.00
HAP-Particulate	0.00
Other Particulate	0.00
Total VOC	0.00
VCM	0.00
TVOS	0.00
EVOS	0.00
HAP-VOC	0.00
Other VOC	0.00
Acid Gases	0.00
HAP-Acid	0.00
Acid	0.00
ETG	0.00
HAP-Gas	0.00
Non-HAP	0.00
CO	0.00
NOx	0.00
SO2	0.00
BASE	0.00
User Pollutants	0.00

#### 4. COMPONENT EMISSION AMOUNTS PER BATCH

##### P-7 in FR-103

Operation	Carb. Dioxide (kg/batch)
TRANSFER-IN-1	0.00
CHARGE-2	0.00
HEAT-1	0.00
FERMENT-1	8.58
COOL-1	0.00
TRANSFER-OUT-1	0.00
Total	8.58

##### P-4 in FR-102

Operation	Carb. Dioxide (kg/batch)
TRANSFER-IN-1	0.00
CHARGE-2	0.00
HEAT-1	0.00
FERMENT-1	8.58
COOL-1	0.00
TRANSFER-OUT-1	0.00
Total	8.58

##### P-1 in FR-101

Operation	Carb. Dioxide (kg/batch)
TRANSFER-IN-1	0.00
CHARGE-2	0.00
HEAT-1	0.00
FERMENT-1	8.58
COOL-1	0.00
TRANSFER-OUT-1	0.00
Total	8.58

##### Batch Totals

Component	Amount (kg)
Carb. Dioxide	25.73
Total	25.73

## 5. PROCEDURE-AVERAGED COMPONENT EMISSION RATES

### P-7 in FR-103 (Cycle Time: 99,65 h)

Operation	Process Time (h)	Carb. Dioxide (kg/h)
TRANSFER-IN-1	33.33	0.00
CHARGE-2	48.00	0.00
HEAT-1	0.00	0.00
FERMENT-1	16.00	0.09
COOL-1	0.40	0.00
TRANSFER-OUT-1	1.00	0.00
Total		0.09

### P-4 in FR-102 (Cycle Time: 99,65 h)

Operation	Process Time (h)	Carb. Dioxide (kg/h)
TRANSFER-IN-1	33.33	0.00
CHARGE-2	48.00	0.00
HEAT-1	0.00	0.00
FERMENT-1	16.00	0.09
COOL-1	0.40	0.00
TRANSFER-OUT-1	1.00	0.00
Total		0.09

### P-1 in FR-101 (Cycle Time: 99,65 h)

Operation	Process Time (h)	Carb. Dioxide (kg/h)
TRANSFER-IN-1	33.33	0.00
CHARGE-2	48.00	0.00
HEAT-1	0.00	0.00
FERMENT-1	16.00	0.09
COOL-1	0.40	0.00
TRANSFER-OUT-1	1.00	0.00
Total		0.09

## 6. OPERATION-AVERAGED COMPONENT EMISSION RATES

### P-7 in FR-103 (Cycle Time: 99,65 h)

Operation	Process Time (h)	Carb. Dioxide (kg/h)
TRANSFER-IN-1	33.33	0.00
CHARGE-2	48.00	0.00
HEAT-1	0.00	0.00
FERMENT-1	16.00	0.54
COOL-1	0.40	0.00
TRANSFER-OUT-1	1.00	0.00

### P-4 in FR-102 (Cycle Time: 99,65 h)

Operation	Process Time (h)	Carb. Dioxide (kg/h)
TRANSFER-IN-1	33.33	0.00
CHARGE-2	48.00	0.00
HEAT-1	0.00	0.00
FERMENT-1	16.00	0.54
COOL-1	0.40	0.00
TRANSFER-OUT-1	1.00	0.00

### P-1 in FR-101 (Cycle Time: 99,65 h)

Operation	Process Time (h)	Carb. Dioxide (kg/h)
TRANSFER-IN-1	33.33	0.00
CHARGE-2	48.00	0.00
HEAT-1	0.00	0.00
FERMENT-1	16.00	0.54
COOL-1	0.40	0.00
TRANSFER-OUT-1	1.00	0.00

## 7. COMPONENT EMISSION RATES (1h Averages)

### Carb. Dioxide (CO2)

Interval	Min Rate	Max Rate	Ave Rate	Source Procedure	Source Operation	Source Rate
(h)	(kg/h)	(kg/h)	(kg/h)			(kg/h)
81,00 - 82,00	0.00	1.61	0.13	P-1	FERMENT-1	0.54
81,00 - 82,00	0.00	1.61	0.13	P-4	FERMENT-1	0.54
81,00 - 82,00	0.00	1.61	0.13	P-7	FERMENT-1	0.54
82,00 - 83,00	1.61	1.61	1.61	P-1	FERMENT-1	0.54
82,00 - 83,00	1.61	1.61	1.61	P-4	FERMENT-1	0.54
82,00 - 83,00	1.61	1.61	1.61	P-7	FERMENT-1	0.54
83,00 - 84,00	1.61	1.61	1.61	P-1	FERMENT-1	0.54
83,00 - 84,00	1.61	1.61	1.61	P-4	FERMENT-1	0.54
83,00 - 84,00	1.61	1.61	1.61	P-7	FERMENT-1	0.54
84,00 - 85,00	1.61	1.61	1.61	P-1	FERMENT-1	0.54
84,00 - 85,00	1.61	1.61	1.61	P-4	FERMENT-1	0.54
84,00 - 85,00	1.61	1.61	1.61	P-7	FERMENT-1	0.54
85,00 - 86,00	1.61	1.61	1.61	P-1	FERMENT-1	0.54
85,00 - 86,00	1.61	1.61	1.61	P-4	FERMENT-1	0.54
85,00 - 86,00	1.61	1.61	1.61	P-7	FERMENT-1	0.54
86,00 - 87,00	1.61	1.61	1.61	P-1	FERMENT-1	0.54
86,00 - 87,00	1.61	1.61	1.61	P-4	FERMENT-1	0.54
86,00 - 87,00	1.61	1.61	1.61	P-7	FERMENT-1	0.54
87,00 - 88,00	1.61	1.61	1.61	P-1	FERMENT-1	0.54
87,00 - 88,00	1.61	1.61	1.61	P-4	FERMENT-1	0.54
87,00 - 88,00	1.61	1.61	1.61	P-7	FERMENT-1	0.54
88,00 - 89,00	1.61	1.61	1.61	P-1	FERMENT-1	0.54
88,00 - 89,00	1.61	1.61	1.61	P-4	FERMENT-1	0.54
88,00 - 89,00	1.61	1.61	1.61	P-7	FERMENT-1	0.54
89,00 - 90,00	1.61	1.61	1.61	P-1	FERMENT-1	0.54
89,00 - 90,00	1.61	1.61	1.61	P-4	FERMENT-1	0.54
89,00 - 90,00	1.61	1.61	1.61	P-7	FERMENT-1	0.54
90,00 - 91,00	1.61	1.61	1.61	P-1	FERMENT-1	0.54
90,00 - 91,00	1.61	1.61	1.61	P-4	FERMENT-1	0.54
90,00 - 91,00	1.61	1.61	1.61	P-7	FERMENT-1	0.54
91,00 - 92,00	1.61	1.61	1.61	P-1	FERMENT-1	0.54
91,00 - 92,00	1.61	1.61	1.61	P-4	FERMENT-1	0.54
91,00 - 92,00	1.61	1.61	1.61	P-7	FERMENT-1	0.54
92,00 - 93,00	1.61	1.61	1.61	P-1	FERMENT-1	0.54
92,00 - 93,00	1.61	1.61	1.61	P-4	FERMENT-1	0.54
92,00 - 93,00	1.61	1.61	1.61	P-7	FERMENT-1	0.54
93,00 - 94,00	1.61	1.61	1.61	P-1	FERMENT-1	0.54
93,00 - 94,00	1.61	1.61	1.61	P-4	FERMENT-1	0.54
93,00 - 94,00	1.61	1.61	1.61	P-7	FERMENT-1	0.54
94,00 - 95,00	1.61	1.61	1.61	P-1	FERMENT-1	0.54
94,00 - 95,00	1.61	1.61	1.61	P-4	FERMENT-1	0.54
94,00 - 95,00	1.61	1.61	1.61	P-7	FERMENT-1	0.54
95,00 - 96,00	1.61	1.61	1.61	P-1	FERMENT-1	0.54

95,00 - 96,00	1.61	1.61	1.61	P-4	FERMENT-1	0.54
95,00 - 96,00	1.61	1.61	1.61	P-7	FERMENT-1	0.54
96,00 - 97,00	1.61	1.61	1.61	P-1	FERMENT-1	0.54
96,00 - 97,00	1.61	1.61	1.61	P-4	FERMENT-1	0.54
96,00 - 97,00	1.61	1.61	1.61	P-7	FERMENT-1	0.54
97,00 - 98,00	0.00	1.61	1.47	P-1	FERMENT-1	0.54
97,00 - 98,00	0.00	1.61	1.47	P-4	FERMENT-1	0.54
97,00 - 98,00	0.00	1.61	1.47	P-7	FERMENT-1	0.54



