

## Saison 13 columbus/oktawia

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **41**
- SRM **10.2**
- Style **Saison**

### Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **10 %**
- Size with trub loss **17.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **77 C**, Time **10 min**

### Mash step by step

- Heat up **15.6 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **10 liter(s)** of **76C** water or to achieve **21.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2 kg (44.9%)	82 %	4
Grain	Viking Wheat Malt	0.5 kg (11.2%)	83 %	5
Grain	Viking Munich Malt	0.75 kg (16.9%)	78 %	18
Grain	Viking Vienna Malt	0.75 kg (16.9%)	79 %	7
Grain	Weyermann - Acidulated Malt	0.15 kg (3.4%)	80 %	6
Grain	Caraaroma	0.15 kg (3.4%)	78 %	400
Grain	Strzegom Karmel 30	0.15 kg (3.4%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	15 g	60 min	15.5 %
Aroma (end of boil)	Oktawia	20 g	20 min	7.1 %
Whirlpool	Oktawia	20 g	1 min	7.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Danstar - Belle Saison	Ale	Dry	11 g	LALLEMAND
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### Extras

Type	Name	Amount	Use for	Time
Flavor	skórka gorzkiej pomarańczy curacao	10 g	Boil	25 min
Flavor	skórka słodkiej pomarańczy	10 g	Boil	25 min