

## Saison #3

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **26**
- SRM **4.2**
- Style **Saison**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **20 %**
- Size with trub loss **24 liter(s)**
- Boil time **80 min**
- Evaporation rate **5 %/h**
- Boil size **26.1 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

### Steps

- Temp **40 C**, Time **40 min**
- Temp **52 C**, Time **15 min**
- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **5 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **17.7 liter(s)** of strike water to **43.3C**
- Add grains
- Keep mash **40 min** at **40C**
- Keep mash **15 min** at **52C**
- Keep mash **50 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **77C**
- Keep mash **1 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3.8 kg (64.2%)	82 %	4
Grain	Viking Vienna Malt	0.5 kg (8.4%)	79 %	7
Grain	Bestmalz Carmel Pils	0.3 kg (5.1%)	75 %	5
Grain	Cara-Pils/Dextrine	0.3 kg (5.1%)	72 %	4
Grain	Wheat, Flaked	0.5 kg (8.4%)	77 %	4
Adjunct	Honey	0.02 kg (0.3%)	75 %	2
Grain	Weyermann - Rye Malt	0.5 kg (8.4%)	85 %	7

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lunga	20 g	50 min	8 %
Aroma (end of boil)	Mandarina Bavaria	10 g	20 min	10 %

Aroma (end of boil)	Hallertau Spalt Select	20 g	20 min	3.4 %
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### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M29 French Saison	Ale	Dry	10 g	Mangrove Jack's

### Extras

Type	Name	Amount	Use for	Time
Spice	Curacao	20 g	Boil	20 min
Spice	Skórka słodka pomarańczowa	20 g	Boil	25 min
Spice	Miód	20 g	Boil	20 min