

## American saison

- Gravity **12.6 BLG**
- ABV ---
- IBU **45**
- SRM **4.8**
- Style **Saison**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **71 C**, Time **10 min**
- Temp **77 C**, Time **1 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **71C**
- Keep mash **1 min** at **77C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (90%)	80 %	5
Grain	Viking Wheat Malt	0.5 kg (10%)	83 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	15.5 %
Boil	Mosaic	20 g	15 min	10 %
Whirlpool	Mosaic	30 g	---	10 %
Dry Hop	Mosaic	50 g	---	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M27 Belgian Ale	Ale	Slant	60 ml	Mangrove Jack's

### Extras

Type	Name	Amount	Use for	Time
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Spice	Aframom Madagaskarski	5 g	Boil	5 min
Spice	curacao	20 g	Boil	5 min
Spice	skórka z cytryny	20 g	Boil	5 min