

## Player no. 1

- Gravity **18.7 BLG**
- ABV **8.1 %**
- IBU **60**
- SRM **5**
- Style **White IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

### Steps

- Temp **62 C**, Time **20 min**
- Temp **73 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **19.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **45 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	3 kg (46.2%)	81 %	5
Grain	Weyermann - Wheat Malt	2 kg (30.8%)	85 %	5
Grain	Weyermann - Rye Malt	1 kg (15.4%)	85 %	7
Grain	Oats, Flaked	0.5 kg (7.7%)	80 %	2

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	35 g	30 min	11.7 %
Boil	Amarillo	40 g	25 min	9.6 %
Boil	Centennial	20 g	7 min	11.1 %
Boil	Cascade	25 g	7 min	7.6 %
Dry Hop	Mosaic	20 g	2 day(s)	12 %
Dry Hop	Amarillo	40 g	2 day(s)	9.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
s-04	Ale	Slant	800 ml	BB

### Extras

Type	Name	Amount	Use for	Time
Fining	Whirlflock	1 g	Boil	15 min