

Five o'clock

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **65**
- SRM **5.1**
- Style **American 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.3 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **65 C**, Time **20 min**
- Temp **73 C**, Time **45 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **20.3 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **20 min** at **65C**
- Keep mash **45 min** at **73C**
- Keep mash **10 min** at **76C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Ireks - Pilsner Malt	3 kg (44.4%)	81 %	4
Grain	Ireks - Wheat Malt	2 kg (29.6%)	85 %	5
Grain	Crisp - Rye Malt	1 kg (14.8%)	63 %	10
Grain	Weyermann - Acidulated Malt	0.25 kg (3.7%)	80 %	6
Grain	Crisp - Naked Oat Malt	0.5 kg (7.4%)	--- %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	30 g	40 min	17.5 %
Boil	Cascade	50 g	20 min	7.6 %
Dry Hop	Warrior	20 g	3 day(s)	17.5 %
Dry Hop	Cascade	50 g	3 day(s)	7.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Mangrove Jack's M44 US West Coast	Ale	Dry	10 g	Mangrove Jack's
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Extras

Type	Name	Amount	Use for	Time
Other	Herbata Earl Grey	100 g	Secondary	5 day(s)