

Zeus

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **59**
- SRM **4.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (83.3%)	80 %	5
Adjunct	Płatki owsiane	1 kg (16.7%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	14.4 %
Boil	Columbus/Tomahawk/Zeus	10 g	45 min	14.4 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	20 g	5 min	14.4 %
Whirlpool	Columbus/Tomahawk/Zeus	50 g	10 min	14.4 %
Dry Hop	Columbus/Tomahawk/Zeus	50 g	4 day(s)	15.5 %
Dry Hop	Citra	50 g	4 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11 g	---

Extras

Type	Name	Amount	Use for	Time
Herb	Zest z mandarynek	1000 g	Boil	5 min

Fining	whirlfloc	10 g	Boil	10 min
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