

Weselne

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **27**
- SRM **6.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **43 liter(s)**
- Trub loss **5 %**
- Size with trub loss **46 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **56.2 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **33 liter(s)**
- Total mash volume **44 liter(s)**

Steps

- Temp **65 C**, Time **90 min**

Mash step by step

- Heat up **33 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **90 min** at **65C**
- Sparge using **34.2 liter(s)** of **76C** water or to achieve **56.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6 kg (54.5%)	--- %	3
Grain	Przeniczny	1 kg (9.1%)	--- %	4
Grain	Monachijski	1 kg (9.1%)	--- %	16
Grain	Cara Blonde - Castle Malting	1 kg (9.1%)	--- %	15
Grain	Karmelowy Jasny 30EBC	2 kg (18.2%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	16.5 %
Boil	Nelson Sauvin	15 g	60 min	12 %
Boil	Nelson Sauvin	15 g	25 min	12 %
Boil	Citra	15 g	5 min	12 %
Boil	Columbus/Tomahawk/Zeus	15 g	5 min	16.5 %
Whirlpool	Citra	35 g	0 min	12 %
Dry Hop	Citra	100 g	7 day(s)	12 %
Dry Hop	Centennial	50 g	7 day(s)	8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	23 g	Fermentis