

Zappanbrat

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **40**
- SRM **4.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **18.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **65 C**, Time **50 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **10.7 liter(s)** of **76C** water or to achieve **18.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	2.5 kg (62.5%)	85 %	7
Grain	Pilzński	1 kg (25%)	81 %	4
Grain	Słód pszeniczny jasny Viking	0.5 kg (12.5%)	82 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Waimea	15 g	15 min	14.3 %
Boil	Zappa	15 g	15 min	10 %
Boil	Strata	15 g	15 min	15.1 %
Aroma (end of boil)	Waimea	30 g	0 min	14.3 %
Aroma (end of boil)	Zappa	15 g	0 min	10 %
Aroma (end of boil)	Strata	15 g	0 min	15.1 %
Whirlpool	Waimea	67 g	0 min	14.3 %
Whirlpool	Zappa	20 g	0 min	10 %
Whirlpool	Strata	20 g	0 min	15.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Omega Yeast OYL-091 Hornindal Kveik	Ale	Liquid	100 ml	Omega Yeast

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc T	10 g	Boil	10 min
Water Agent	Gips Piwowarski	10 g	Mash	60 min