Otwarcie sezonu

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **74**
- SRM **10.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25.5 liter(s)**
- Trub loss **3 %**
- Size with trub loss **27 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **32.5 liter(s)**

Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **25.9 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **19.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **76C**
- Sparge using **19.6 liter(s)** of **76C** water or to achieve **32.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6 kg *(92.6%)*	80 %	5
Grain	Strzegom Karmel 300	0.4 kg *(6.2%)*	70 %	299
Grain	Karmelowy Czerwony	0.08 kg *(1.2%)*	75 %	59

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Equinox	33 g	60 min	13.1 %
Boil	Centennial	20 g	30 min	9.4 %
Boil	Cascade	20 g	30 min	6 %
Aroma (end of boil)	Centennial	15 g	10 min	9.4 %
Aroma (end of boil)	Mosaic	15 g	10 min	11.7 %
Aroma (end of boil)	Citra	25 g	10 min	12 %
Dry Hop	Citra	25 g	20 day(s)	12 %
Dry Hop	Mosaic	25 g	20 day(s)	11.7 %
Dry Hop	Cascade	20 g	20 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Gęstwa	Ale	Slant	200 ml	końska derka