Dziki zachód

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **60**
- SRM **4**
- 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 **5 %/h**
- Boil size **24.1 liter(s)**

Mash information

- Mash efficiency **87 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **23.9 liter(s)**

Steps

- Temp **64 C**, Time **80 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18.6 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **80 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **10.8 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.13 kg *(40%)*	80 %	5
Grain	Pilzneński	2.55 kg *(47.9%)*	81 %	4
Grain	Strzegom Pszeniczny	0.43 kg *(8.1%)*	81 %	6
Grain	wiedeński	0.21 kg *(3.9%)*	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	citra	29.79 g	60 min	12 %
Boil	Amarillo	19.15 g	20 min	9.5 %
Boil	Cascade	12.77 g	20 min	6 %
Boil	centennial	17.02 g	20 min	8.5 %
Aroma (end of boil)	Centennial	8.51 g	1 min	10.5 %
Aroma (end of boil)	Cascade	19.15 g	1 min	6 %
Dry Hop	Citra	17.02 g	4 day(s)	12 %
Dry Hop	Amarillo	12.77 g	4 day(s)	9.5 %
Dry Hop	Cascade	31.91 g	4 day(s)	6 %
Dry Hop	Centennial	27.66 g	4 day(s)	10.5 %

Yeasts

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Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	4.89 g	---

Extras

Type	Name	Amount	Use for	Time
Spice	earl grey	63.83 g	Secondary	7 day(s)

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