

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **44**
- SRM **8.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **5.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **6.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **5.6 liter(s)**
- Total mash volume **7.4 liter(s)**

Steps

- Temp **67 C**, Time **40 min**

Mash step by step

- Heat up **5.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **40 min** at **67C**
- Sparge using **2.7 liter(s)** of **76C** water or to achieve **6.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	0.25 kg (13.5%)	79 %	10
Grain	Viking Pale Ale malt	1.5 kg (81.1%)	80 %	5
Grain	Słód Caramunich Typ II Weyermann	0.1 kg (5.4%)	73 %	120

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	5 g	40 min	15.5 %
Boil	Palisade	5 g	40 min	7.5 %
Boil	Cascade PL	5 g	40 min	5.2 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	5 g	0 min	15.5 %
Aroma (end of boil)	Palisade	5 g	0 min	7.5 %
Aroma (end of boil)	Cascade PL	5 g	0 min	5.2 %
Dry Hop	Columbus/Tomahawk/Zeus	5 g	3 day(s)	15.5 %
Dry Hop	Palisade	5 g	3 day(s)	7.5 %
Dry Hop	Cascade PL	5 g	3 day(s)	5.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	5 g	Fermentis