

Wiosenne

- Gravity **8.3 BLG**
- ABV **3.2 %**
- IBU **79**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **15.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.2 liter(s)**
- Total mash volume **8.3 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **6.2 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **15.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.44 kg (69.2%)	80 %	5
Grain	Karmelowy Czerwony	0.24 kg (11.5%)	75 %	59
Grain	Płatki orkiszowe	0.4 kg (19.2%)	60 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	5 g	60 min	13.5 %
Boil	African Queen	25 g	20 min	13.5 %
Aroma (end of boil)	African Queen	25 g	1 min	13.5 %
Whirlpool	African Queen	25 g	15 min	13.5 %
Dry Hop	African Queen	25 g	3 day(s)	13.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis