

#7_19_ŚwierkALE'19

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **37**
- SRM **6.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.7 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.2 liter(s)**
- Total mash volume **27.2 liter(s)**

Steps

- Temp **68 C**, Time **80 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **21.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **80 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **28.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale - Bydgoszcz	5.5 kg (90.9%)	69 %	6
Grain	Caramel/Crystal Malt - 30L	0.4 kg (6.6%)	75 %	59
Grain	Caramunich® typ I	0.15 kg (2.5%)	73 %	80

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Citra	20 g	60 min	12 %
Boil	Citra	15 g	20 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

Extras

Type	Name	Amount	Use for	Time
Flavor	Pędy świerku	140 g	Boil	30 min
Flavor	Pędy świerku	100 g	Boil	2 min