

Świerkowe

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **27**
- SRM **4.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **26.9 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **22.1 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Sparge using **11.1 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (63.5%)	81 %	4
Grain	Pszeniczny	1.5 kg (23.8%)	85 %	4
Grain	Monachijski	0.5 kg (7.9%)	80 %	16
Grain	Weyermann - Acidulated Malt	0.3 kg (4.8%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	50 min	11 %
Whirlpool	Citra	30 g	1 min	12 %

Extras

Type	Name	Amount	Use for	Time
Herb	pepy świerku	200 g	Boil	30 min
Herb	pepy świerku	100 g	Boil	0 min