Świerkowe 3

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **27**
- SRM **4.8**
- 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 **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.2 liter(s)**
- Total mash volume **28.6 liter(s)**

Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **22.2 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **40 min** at **65C**
- 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%)*	81 %	4
Grain	Pszeniczny	1.5 kg *(23.6%)*	85 %	4
Grain	Monachijski	0.5 kg *(7.9%)*	80 %	16
Grain	Weyermann - Acidulated Malt	0.35 kg *(5.5%)*	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	25 g	60 min	11 %
Whirlpool	Citra	50 g	1 min	12 %

Extras

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

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.