Słoneczna Włócznia

- Gravity 11.8 BLG
- ABV ----
- IBU **13**
- SRM 4.1
- Style Witbier

Batch size

- Expected quantity of finished beer 24 liter(s)
- Trub loss 5 %
- Size with trub loss 25.2 liter(s)
- · Boil time 65 min
- Evaporation rate 15 %/h
- Boil size 32.1 liter(s)

Mash information

- Mash efficiency 78 %
- Liquor-to-grist ratio 3.5 liter(s) / kg
- Mash size 17.5 liter(s)
- Total mash volume 22.5 liter(s)

Steps

- Temp 50 C, Time 30 min
 Temp 64 C, Time 60 min
 Temp 72 C, Time 30 min
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up 17.5 liter(s) of strike water to 54.3C
- Add grains
- Keep mash 30 min at 50C
- · Keep mash 60 min at 64C
- Keep mash 30 min at 72C
- Keep mash 5 min at 77C
- Sparge using 19.6 liter(s) of 76C water or to achieve 32.1 liter(s) of wort

Fermentables

Туре	Name	Amount	Yield	EBC
Grain	Pilzneński	2.2 kg <i>(44%)</i>	81 %	4
Grain	Pszeniczny	0.8 kg <i>(16%)</i>	85 %	4
Grain	Weyermann - Abbey Malt	0.1 kg <i>(2%)</i>	50 %	45
Grain	Oats, Flaked	0.4 kg (8%)	80 %	2
Grain	Pszenica niesłodowana	1.5 kg <i>(30%)</i>	75 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	25 g	60 min	4.5 %
Boil	Hallertau	10 g	10 min	4.5 %

Yeasts

Name	Туре	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	11 g	Safbrew

Extras

Туре	Name	Amount	Use for	Time
Spice	Curacao	25 g	Boil	10 min
Spice	Kolendra	25 g	Boil	10 min
Flavor	Skórka z pomarańczy	100 g	Boil	10 min
Flavor	Skórka z cytryny	20 g	Boil	10 min