Amerykańska sosna v.2

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **40**
- SRM **4.5**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.3 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.2 liter(s)** of strike water to **70.9C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17.9 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	1.8 kg *(32.3%)*	80 %	4
Grain	Słód PSZENICZNY Viking Malt	2 kg *(35.9%)*	82 %	5
Grain	Słód Cookie Viking Malt 1kg śrutowany	0.1 kg *(1.8%)*	--- %	40
Adjunct	Płatki owsiane	0.5 kg *(9%)*	60 %	3
Grain	Słód Viking Pale Ale malt "0"	0.717 kg *(12.9%)*	79 %	5
Grain	Słód MONACHIJSKI typ I 16 EBC Crisp	0.45 kg *(8.1%)*	82 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo USA	21 g	60 min	9.5 %
Boil	Chinok pl	16 g	60 min	6.6 %
Aroma (end of boil)	Falconer's Flight USA	30 g	10 min	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory

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

wb-06	Wheat	Dry	11 g	---

Extras

Type	Name	Amount	Use for	Time
Flavor	pędy sosnowe	170 g	Boil	10 min