

## Sosna

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **28**
- SRM **4.1**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **19.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (36.4%)	80 %	5
Grain	Strzegom Pilzneński	3.5 kg (63.6%)	80 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	15 g	30 min	12 %
Boil	Chinook	10 g	60 min	13 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Flavor	peły sosny	100 g	Boil	30 min
Flavor	peły sosny	50 g	Boil	0 min