

# sosnowy pale ale pierwszy przepis eksperymentalny

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **31**
- SRM **6.8**
- Style **American Pale Ale**

## 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 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **66 C**, Time **50 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **10 min** at **77C**
- Sparge using **15.3 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	4 kg (80%)	80 %	5
Grain	Caramel/Crystal Malt - 20L	1 kg (20%)	75 %	39

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	10 g	60 min	12.4 %
Boil	Oktawia	20 g	10 min	8.6 %
Boil	lunga	10 g	30 min	12.4 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Flavor	sok z pędów sosny z cukrem	500 g	Boil	60 min

sok z pędów liczony jako cukier+ ilość cukru potrzebna do refermentacji w sumie 140 g w litrze wody