

# Krzyżodziób sosnowy - Sosnowe APA

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **33**
- SRM **4.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **21.6 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

## Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **75 C**, Time **5 min**

## Mash step by step

- Heat up **15.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (96.2%)	80 %	5
Grain	Płatki owsiane	0.2 kg (3.8%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	30 g	60 min	5.8 %
Boil	Marynka	10 g	20 min	6.5 %
Boil	Marynka	10 g	10 min	6.5 %
Aroma (end of boil)	Marynka	10 g	10 min	6.5 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Flavor	Pędy sosnowe	150 g	Boil	30 min

Flavor	Pędy sosnowe	100 g	Boil	5 min
--------	--------------	-------	------	-------