

# 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 |
|--------|--------------|-------|------|-------|