

# Sosna

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **33**
- SRM **5.8**
- Style **White IPA**

## Batch size

- Expected quantity of finished beer **33 liter(s)**
- Trub loss **10 %**
- Size with trub loss **39.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **49.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **36 liter(s)**
- Total mash volume **48 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **36 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **25.3 liter(s)** of **76C** water or to achieve **49.3 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount        | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt       | 8 kg (66.7%)  | 80 %  | 5   |
| Grain | Strzegom Monachijski typ I | 1 kg (8.3%)   | 79 %  | 16  |
| Grain | Pszeniczny                 | 2 kg (16.7%)  | 85 %  | 4   |
| Grain | Karmelowy Jasny 30EBC      | 0.5 kg (4.2%) | 75 %  | 30  |
| Grain | Płatki owsiane             | 0.5 kg (4.2%) | 85 %  | 3   |

## Hops

| Use for             | Name     | Amount | Time   | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil                | Chinook  | 50 g   | 60 min | 8.5 %      |
| Aroma (end of boil) | Amarillo | 50 g   | 5 min  | 9.5 %      |
| Aroma (end of boil) | Simcoe   | 50 g   | 5 min  | 13.2 %     |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 12 g   | Fermentis  |

## Extras

| Type        | Name            | Amount | Use for | Time   |
|-------------|-----------------|--------|---------|--------|
| Flavor      | Pedy sosny      | 150 g  | Boil    | 30 min |
| Flavor      | Pedy sosny      | 150 g  | Boil    | 5 min  |
| Water Agent | Gips piwowarski | 6 g    | Boil    | 60 min |