

Sosenkowy gaj single hop

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **23**
- SRM **4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **25.1 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **19.4 liter(s)** of strike water to **56.7C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.5 kg (61.4%) | 80 % | 2 |
| Grain | Viking Vienna Malt | 1.5 kg (26.3%) | 79 % | 7 |
| Grain | Słód Chateau Biscuit | 0.2 kg (3.5%) | 77 % | 50 |
| Grain | Płatki owsiane błyskawiczne | 0.5 kg (8.8%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------|--------|--------|------------|
| Boil | Chinook PL | 20 g | 60 min | 7.5 % |
| Boil | Chinook PL | 10 g | 10 min | 7.5 % |
| Whirlpool | Chinook PL | 30 g | 20 min | 7.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|--------|
| Fining | whirlfloc | 5 g | Boil | 10 min |