

#197 Ciemna pszenica

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **10**
- SRM **15.2**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **21.9 liter(s)**
- Trub loss **6 %**
- Size with trub loss **23.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **25.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.05 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18.6 liter(s)**

Steps

- Temp **44 C**, Time **10 min**
- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **47.9C**
- Add grains
- Keep mash **10 min** at **44C**
- Keep mash **30 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|-----------------|-------|-----|
| Grain | Viking Malt pszeniczny | 2.65 kg (57.6%) | 81 % | 5 |
| Grain | Viking Malt monachijski | 1.5 kg (32.6%) | 80 % | 15 |
| Grain | Viking Malt karmelowy ciemny | 0.25 kg (5.4%) | 75 % | 600 |
| Grain | Viking Malt karmelowy jasny | 0.2 kg (4.3%) | 75 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------------------------|--------|--------|------------|
| Boil | Lubelski PL 2022 granulat | 25 g | 60 min | 3.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------|-------|-------|--------|------------------|
| FM41 Gwoździe i Banany | Wheat | Slant | 50 ml | Fermentum Mobile |