

CDA

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **39**
- SRM **39.5**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.1 liter(s)**
- Total mash volume **16.9 liter(s)**

Steps

- Temp **68 C**, Time **70 min**

Mash step by step

- Heat up **13.1 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **6.3 liter(s)** of **76C** water or to achieve **15.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------|--------------|-------|------|
| Grain | Briess - Pale Ale Malt | 3 kg (80%) | 80 % | 7 |
| Grain | Weyermann - Dehusked Carafa III | 0.3 kg (8%) | 70 % | 1500 |
| Grain | Special X | 0.15 kg (4%) | 72 % | 400 |
| Grain | Pszeniczny | 0.3 kg (8%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|---------|----------|------------|
| Boil | Centennial | 13.1 g | 60 min | 10.5 % |
| Boil | Cascade | 13.1 g | 45 min | 6 % |
| Boil | Willamette | 13.1 g | 15 min | 5 % |
| Boil | Cascade | 13.1 g | 0 min | 6 % |
| Dry Hop | Cascade | 26.19 g | 5 day(s) | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|--------|------------------|
| FM52 Amerykański Sen | Ale | Liquid | 72 ml | Fermentum Mobile |