

SRP

- Gravity **15 BLG**
- ABV ---
- IBU **47**
- SRM **31.2**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **18.4 liter(s)**
- Total mash volume **23 liter(s)**

Steps

- Temp **65 C**, Time **90 min**

Mash step by step

- Heat up **18.4 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **90 min** at **65C**
- Sparge using **6 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|-----------------------------|----------------|-------|------|
| Grain | Briess - Pale Ale Malt | 2.4 kg (49%) | 80 % | 7 |
| Grain | Casle Malting Whisky Nature | 1.5 kg (30.6%) | 85 % | 4 |
| Grain | Fawcett - Pale Chocolate | 0.3 kg (6.1%) | 71 % | 600 |
| Grain | Fawcett - Pale Caramalt | 0.2 kg (4.1%) | 70 % | 15 |
| Grain | Castlemalting - Black | 0.2 kg (4.1%) | 55 % | 1350 |
| Adjunct | Platki owsiane | 0.3 kg (6.1%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 15 g | 45 min | 14.6 % |
| Boil | Columbus/Tomahawk/Zeus | 15 g | 15 min | 14.6 % |
| Boil | Columbus/Tomahawk/Zeus | 20 g | 5 min | 14.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------|-----------------------------|--------|-----------|-----------|
| Spice | Wędzone śliwki | 300 g | Boil | 15 min |
| Spice | Wędzone śliwki | 300 g | Secondary | 14 day(s) |
| Spice | Płatki z beczki po burbonie | 50 g | Secondary | 14 day(s) |