

Black Piter

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **69**
- SRM **34.3**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

Steps

- Temp **65 C**, Time **70 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **19.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **70 min** at **65C**
- Keep mash **5 min** at **76C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|-------|------|
| Grain | Strzegom Pale Ale | 5.5 kg (85.9%) | 79 % | 6 |
| Grain | Fawcett - Pale Chocolate | 0.5 kg (7.8%) | 71 % | 600 |
| Grain | Carafa II | 0.2 kg (3.1%) | 70 % | 812 |
| Grain | Carafa III | 0.2 kg (3.1%) | 70 % | 1034 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 30 g | 60 min | 15.5 % |
| Boil | Simcoe | 20 g | 60 min | 13.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|--------|------------------|
| FM52 Amerykański Sen | Ale | Liquid | 300 ml | Fermentum Mobile |