

Czarny ipa

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **63**
- SRM **51.8**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 3.1 kg (50.8%) | 80 % | 5 |
| Grain | Pilzneński | 1 kg (16.4%) | 81 % | 4 |
| Grain | Strzegom Monachijski typ II | 1 kg (16.4%) | 79 % | 22 |
| Grain | Strzegom Barwiący | 1 kg (16.4%) | 68 % | 1300 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Marynka | 30 g | 60 min | 10 % |
| Boil | Sybilla | 30 g | 30 min | 3.5 % |
| Boil | Chinook | 30 g | 20 min | 13 % |
| Aroma (end of boil) | Ctz | 50 g | 0 min | 15.8 % |
| Aroma (end of boil) | Marynka | 50 g | 0 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| Us-05 | Ale | Dry | 11.5 g | Fermentis |