

Black Ipa v3

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **36**
- SRM **28.8**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **22 liter(s)**
- Total mash volume **30.8 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **22 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **76C**
- Sparge using **19.8 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|------|
| Grain | Strzegom Pszeniczny | 1 kg (11.4%) | 81 % | 6 |
| Grain | Strzegom Pilzneński | 4 kg (45.5%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ I | 1 kg (11.4%) | 79 % | 16 |
| Grain | Weyermann - Carapils | 0.5 kg (5.7%) | 78 % | 4 |
| Grain | Fawcett - Pale Chocolate | 0.5 kg (5.7%) | 71 % | 600 |
| Grain | Strzegom Czekoladowy ciemny | 0.3 kg (3.4%) | 68 % | 1200 |
| Grain | Płatki owsiane | 0.5 kg (5.7%) | 60 % | 3 |
| Grain | Viking Pale Ale malt | 1 kg (11.4%) | 80 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------|--------|----------|------------|
| Boil | Magnum | 20 g | 60 min | 13.5 % |
| Whirlpool | Galaxy | 50 g | 15 min | 15 % |
| Boil | Magnum | 10 g | 3 min | 13.5 % |
| Dry Hop | Galaxy | 50 g | 3 day(s) | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 400 ml | Fermentis |