

green choke I

- Gravity **16.1 BLG**
- ABV ---
- IBU **83**
- SRM **29.9**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **73 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|---------------|-------|------|
| Grain | Weyermann - Pilsner Malt | 5 kg (71.4%) | 81 % | 5 |
| Grain | Viking Pale Ale malt | 0.5 kg (7.1%) | 80 % | 5 |
| Grain | Strzegom Pszeniczny | 0.7 kg (10%) | 81 % | 6 |
| Grain | Carafa II (special) | 0.5 kg (7.1%) | 70 % | 812 |
| Grain | Strzegom Karmel 150 | 0.2 kg (2.9%) | 75 % | 150 |
| Grain | Strzegom Barwiący | 0.1 kg (1.4%) | 68 % | 1300 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil | Marynka | 50 g | 60 min | 10 % |
| Boil | Simcoe | 20 g | 60 min | 13.2 % |
| Boil | Simcoe | 50 g | 5 min | 13.2 % |
| Whirlpool | Simcoe | 30 g | 0 min | 13.2 % |
| Dry Hop | Simcoe | 100 g | 4 day(s) | 13.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale | Dry | 11.5 g | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|---------------------|--------|---------|------|
| Water Agent | kwask fosforowy 80% | 69 g | Mash | --- |
| Water Agent | gips piwowarski | 69 g | Mash | --- |

Notes

- Carafa II Special na ColdBrew
Feb 8, 2016, 7:28 PM