

Czarna Materia [2]

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **59**
- SRM **39.1**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|---------------|-------|------|
| Grain | Strzegom Pale Ale | 4 kg (58.8%) | 79 % | 6 |
| Grain | Strzegom Monachijski typ II | 1 kg (14.7%) | 79 % | 22 |
| Grain | Płatki owsiane | 0.5 kg (7.4%) | 85 % | 3 |
| Grain | Weyermann - Carafa III Special | 0.5 kg (7.4%) | 70 % | 1300 |
| Grain | Weyermann - Carared | 0.5 kg (7.4%) | 75 % | 45 |
| Sugar | Sugar, Table (Sucrose) | 0.2 kg (2.9%) | 100 % | 2 |
| Grain | Strzegom Barwiący | 0.1 kg (1.5%) | 68 % | 1300 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------|--------|----------|------------|
| Boil | Centennial | 50 g | 60 min | 8.5 % |
| Boil | Centennial | 30 g | 15 min | 8.5 % |
| Boil | Centennial | 30 g | 0 min | 8.5 % |
| Whirlpool | Centennial | 40 g | 15 min | 8.5 % |
| Dry Hop | Centennial | 200 g | 2 day(s) | 8.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 200 ml | Fermentis |