

Czorne

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **30**
- SRM **39.9**
- Style **Oatmeal Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.5 liter(s)**
- Total mash volume **20.6 liter(s)**

Steps

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

Mash step by step

- Heat up **15.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|--------------------|-----------------|-------|------|
| Grain | Strzegom Pale Ale | 4 kg (71.4%) | 79 % | 6 |
| Grain | Caraaroma | 0.65 kg (11.6%) | 78 % | 400 |
| Grain | Roasted Barley | 0.25 kg (4.5%) | 65 % | 1100 |
| Grain | Carafa III Special | 0.25 kg (4.5%) | 70 % | 1300 |
| Adjunct | płatki owsiane | 0.45 kg (8%) | --- % | 3.5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 10 g | 60 min | 15.5 % |
| Boil | Glacier | 15 g | 60 min | 5.5 % |
| Aroma (end of boil) | Glacier | 15 g | 15 min | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |

Notes

- jak wyjdzie nizszy ekstrakt, to mniej chmielu
Sep 7, 2017, 3:20 PM