

Czarny Baran

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **26**
- SRM **34.9**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **26.6 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 2.5 kg (42.4%) | 80 % | 6 |
| Grain | Płatki owsiane | 0.8 kg (13.6%) | 60 % | 7 |
| Grain | Cara Crisp | 1 kg (16.9%) | 78 % | 30 |
| Grain | Brown Crisp | 0.4 kg (6.8%) | 70 % | 135 |
| Grain | Crystal Medium Crisp | 0.4 kg (6.8%) | 71 % | 270 |
| Grain | Crystal Dark Crisp | 0.4 kg (6.8%) | 71 % | 450 |
| Grain | Chocolate Crisp | 0.4 kg (6.8%) | 25 % | 1000 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Oktawia | 45 g | 60 min | 5.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 5 g | Boil | 15 min |