

Ciorny beret

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **25**
- SRM **42.8**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.5 liter(s)**
- Total mash volume **14.8 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **11.5 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	1.5 kg (45.5%)	79 %	6
Grain	Żytni	0.5 kg (15.2%)	85 %	8
Grain	Płatki owsiane	0.5 kg (15.2%)	85 %	3
Grain	Weyermann - Dehusked Carafo III	0.25 kg (7.6%)	70 %	1024
Grain	Fawcett - Pszeniczny Czekoladowy	0.15 kg (4.5%)	73 %	1001
Grain	Fawcett - Czekoladowy	0.15 kg (4.5%)	60 %	788
Grain	Caraaroma	0.15 kg (4.5%)	78 %	400
Grain	Special B Malt	0.1 kg (3%)	65.2 %	315

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Iunga	12 g	60 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
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WLP645 - Brettanomyces clausenii	Ale	Slant	100 ml	White Labs
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