

CzarnoBrody AA

- Gravity **13.6 BLG**
- ABV ---
- IBU **95**
- SRM **48.6**
- Style **American Stout**

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 **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **75 C**, Time **2 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **2 min** at **75C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.7 kg (75.5%)	85 %	7
Grain	Barley, Flaked	0.5 kg (10.2%)	70 %	4
Grain	Weyermann Carafo Special I	0.3 kg (6.1%)	70 %	800
Grain	Jęczmień palony	0.3 kg (6.1%)	55 %	985
Grain	Weyerermann Pszeniczny Czekoladowy	0.1 kg (2%)	73 %	1001

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	40 g	60 min	12.4 %
Boil	Citra	10 g	30 min	12.4 %
Boil	Citra	10 g	5 min	12.4 %
Boil	Galaxy	15 g	30 min	13.6 %
Boil	Galaxy	15 g	5 min	13.6 %
Dry Hop	Galaxy	30 g	3 day(s)	13.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis