

56-Porter 29.12.19

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **31**
- SRM **22.6**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **75 min**
- Evaporation rate **15 %/h**
- Boil size **15.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **5.7 liter(s)** of **76C** water or to achieve **15.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	1.3 kg (32.5%)	80 %	16
Grain	Wiedeński	1 kg (25%)	79 %	8
Grain	Pale Ale	1 kg (25%)	80 %	7
Grain	Cara-Dunkel	0.5 kg (12.5%)	74 %	120
Grain	Słód Wędzony Steinbach	0.1 kg (2.5%)	80 %	5
Grain	Czekoladowy UK	0.1 kg (2.5%)	70 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galena	12 g	70 min	13 %
Aroma (end of boil)	Saaz (Czech Republic)	15 g	10 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	6 g	Danstar

Extras

Type	Name	Amount	Use for	Time
Flavor	espresso	50 g	Bottling	---