Dry stout z Browamatora

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **12**
- SRM **22.8**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 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 **16.1 liter(s)**
- Total mash volume **20.7 liter(s)**

Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **16.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **14.9 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	3.2 kg *(69.6%)*	85 %	7
Grain	Carafa II	0.1 kg *(2.2%)*	70 %	812
Grain	Jęczmień palony	0.3 kg *(6.5%)*	55 %	985
Grain	Barley, Flaked	0.5 kg *(10.9%)*	70 %	4
Grain	Płatki jęczmienne	0.5 kg *(10.9%)*	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	15 g	60 min	5.1 %
Aroma (end of boil)	East Kent Goldings	15 g	10 min	5.1 %

Yeasts

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